

THE

Desert

M A G A Z I N E



JANUARY, 1947

25 CENTS



29 Palms Sunset . . .

First prize winning picture in Desert Magazine's November contest. Photograph by Max Elliott of Santa Ana, California. Picture was taken at 1/25 second at f:11 on Agfa Supreme, with a piece of yellow cellophane as a filter. Palms are the native Washingtonias from which 29 Palms, California, derives its name.

Special Merit . . .

There were so many and such exceptionally fine prints submitted in Desert's November contest, the judges were called upon to make very difficult decisions. Two or three of the best photographs, however, had to be ruled out because of technical flaws in developing and printing. In addition to the prize winners, the following prints were purchased from among the entries for future use in Desert Magazine:

Sunset over Wupatki Ruin, by Tad Nichols, Tucson, Arizona.

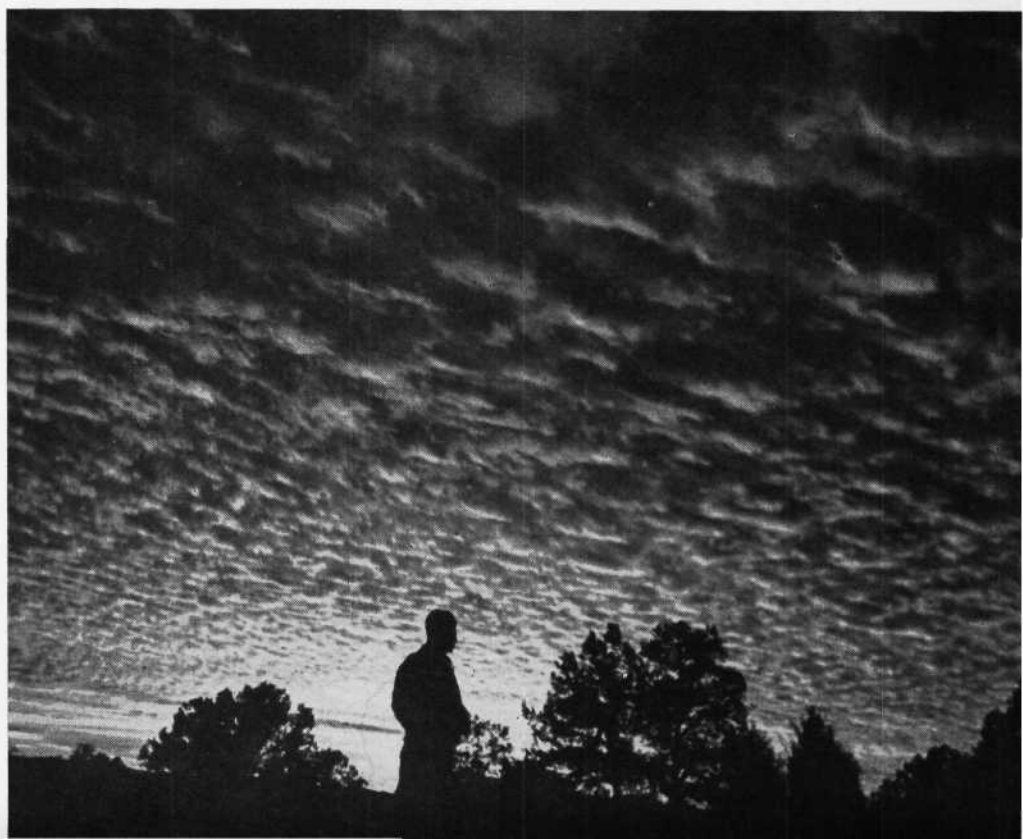
Cross of the Martyrs, by Geo. W. Thompson, Albuquerque, New Mexico.

Lordsburg Sunset, by S. Paul Lindau, Los Angeles, California.

Salton Sea Sunset, Joshua Sunset and Victorville Sunset, by Nicholas N. Kozloff, San Bernardino, California.

New Mexico Sunset . . .

Loren G. Snook of Pagosa Springs, Colorado, won second prize in the November contest with this photograph taken between Shiprock and Gallup, New Mexico. Taken with a Rolleiflex camera on Eastman Super XX. Time 1/50 at f:11 with K2 filter. The shrubbery is juniper and sage, and G. M. Tucker of Pagosa Springs is the figure.



DESERT Close-Ups

• Before the war, during which he served in the Army Air Forces as air and ground instructor in operation, theory and maintenance of air-borne radar equipment at Boca Raton, Florida, Harold O. Weight, was a printer in Los Angeles. He also had done some writing, but as he explains it, "the checks come along more regularly in the printing trade than in the profession of free lance writing." But he also had a hobby—or several of them. When he could get away for a few days he headed for the desert to collect rocks, take photographs and explore the more remote areas. And he acquired quite a library of the fact and lore of the desert country. This month Harold became a member of Desert Magazine staff as an associate editor. His time will be divided between the editorial desk and the desert trails and highways where he will serve as a roving reporter. Harold is a modest young man—and while he writes both fact and fiction, he never gets the two confused. He is a thorough student of the desert—and we are glad to have him as a staff associate. His second story for DESERT will appear soon.

• Richard Van Valkenburgh's next story for DESERT describes his trek along the "Turquoise Trail" in an effort to find the "lost" mines from which prehistoric Zuni Indians obtained turquoise. Location of these mines has been source of speculation for many years, some authorities believing they may have been the Cerrillos mines southwest of Santa Fe, others claiming they were in the California-Nevada deposits. Van could not prove that the turquoise workings he found were the traditional source, but at least there was evidence of early Indian occupation.

DESERT CALENDAR

- Jan. 1—New Year ski races, Arizona snow bowl, Flagstaff, Arizona.
- Jan. 1—New Year dances, many New Mexico Indian pueblos.
- Jan. 4-10—Sons of Utah Pioneers "Know Your Utah Week." Part of Centennial year celebrations.
- Jan. 6—Traditional installation of newly elected governors of Indian pueblos, New Mexico.
- Jan. 8-10—Golden Jubilee convention, American National Livestock association, Phoenix, Arizona.
- Jan. 15-24—Black Hills Passion play, Kingsbury hall, University of Utah.
- Jan. 22-26—14th Annual Livestock show, Tucson, Arizona.
- Jan. 25-26—Sierra Club trip to Seventeen Palms oasis, Borrego Badlands. Russell Hubbard, 2071 Balmer Dr., Los Angeles, leader; Randall Henderson, co-leader.

CREED OF THE DESERT

By JUNE LEMERT PAXTON
Yucca Valley, California

As they roll along o'er prairie wide,
Their carefree life they cannot hide;
For wind and space supply the needs
Of these rollicking, restless tumbleweeds.



Volume 10

JANUARY, 1947

Number 3

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The Desert Magazine is published monthly by the Desert Press, Inc., 636 State Street, El Centro, California. Entered as second class matter October 11, 1937, at the post office at El Centro, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1947 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

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LUCILE HARRIS and HAROLD O. WEIGHT, Associate Editors.

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SUBSCRIPTION RATES

One Year . . . \$3.00 Two years . . . \$5.00
Canadian subscriptions 25c extra, foreign 50c extra.

Subscriptions to Army personnel outside U.S.A. must be mailed in conformity with P.O.D. Order No. 19687.

Address correspondence to Desert Magazine, 636 State Street, El Centro, California.



The original two palms at Dos Palmas have now increased to 27. The grade of the All-American canal may be seen at the base of Orocopia mountains in the background.

Waterhole on the Old Bradshaw Trail

Gold at La Paz! Eighty-four years ago prospectors poured through the Colorado desert, and Bill Bradshaw flung a freight road across a wilderness that has remained, to this day, dry and desolate and uninhabited. This month, Randall Henderson takes Desert readers to one of the most important waterholes on that forgotten road—historic Dos Palmas oasis.

By RANDALL HENDERSON

IN 1862 when rumors reached San Bernardino, California, that Mexican prospectors were finding big nuggets of gold in the gravel along the Colorado river at a place called La Paz, there was feverish excitement as every man with adventure in his blood began looking for transportation to the new placer strike.

But where was La Paz? Freight drivers on the road from San Bernardino through San Geronio pass and thence to Yuma had brought in news of the new gold field. Pauline Weaver, trapper and frontiersman, had brought some of the gold to Yuma, they said. But the teamsters had only a vague idea as to where the golden gravel was located.

"Up the river somewhere above Yuma—perhaps a hundred miles," was the only information they could give. "No, there were no roads up the river. Only Indian trails."

But lack of roads is no serious obstacle when gleaming nuggets lay thick underfoot, and fortunes may be recovered with crude placer tools. And so the stampede was on. On horseback, in buckboards, and in lumbering freight wagons men were heading out into the desert as fast as they could get together their grubstakes and equipment. Bill Bradshaw, described by his friend and biographer, Major Horace Bell, as a "natural lunatic," was one of the

first to reach the new field. A giant in stature, and a brave and competent man despite his eccentricities, Bradshaw could see no sense in making the long detour to Yuma and thence up the river, when a more direct route might be found over the 180-mile span of desert between San Geronio and the Colorado river.

From Chief Cabazon of the Desert Cahuilla Indians, Bradshaw learned the location of the springs and waterholes along the southern toe of the Chuckawalla range—Dos Palmas, Canyon springs, Tabaseca tanks, Chuckawalla spring, Mule spring, and thence into the Palo Verde valley and the Colorado river. Bradshaw went over the route with an Indian guide, found the springs as they had been described by the Cahuilla chief—and with characteristic energy began building a freight road.

Much of the old road may still be followed, in a rugged automobile, and all the old Bradshaw waterholes may be found today with one exception. Ruins of the old stage station at Mule spring still mark the site, but the spring has long since dried up and disappeared beneath the blow sand.

Perhaps Bradshaw was not aware of it, but he was indebted to those natural forces which created the great San Andreas earthquake fault and its tributary fractures, for part of the water supply along his route.

The springs at Dos Palmas are fault

springs. Their flowing water comes from that great underground fissure which may be traced across the Colorado desert from Desert Hot springs community at the base of the Little San Bernardino mountain range through the Indio and Mecca hills and thence to the Algodones sand dunes east of El Centro which themselves are believed to be an indirect result of the fractures in the earth's crust known as the San Andreas fault system.

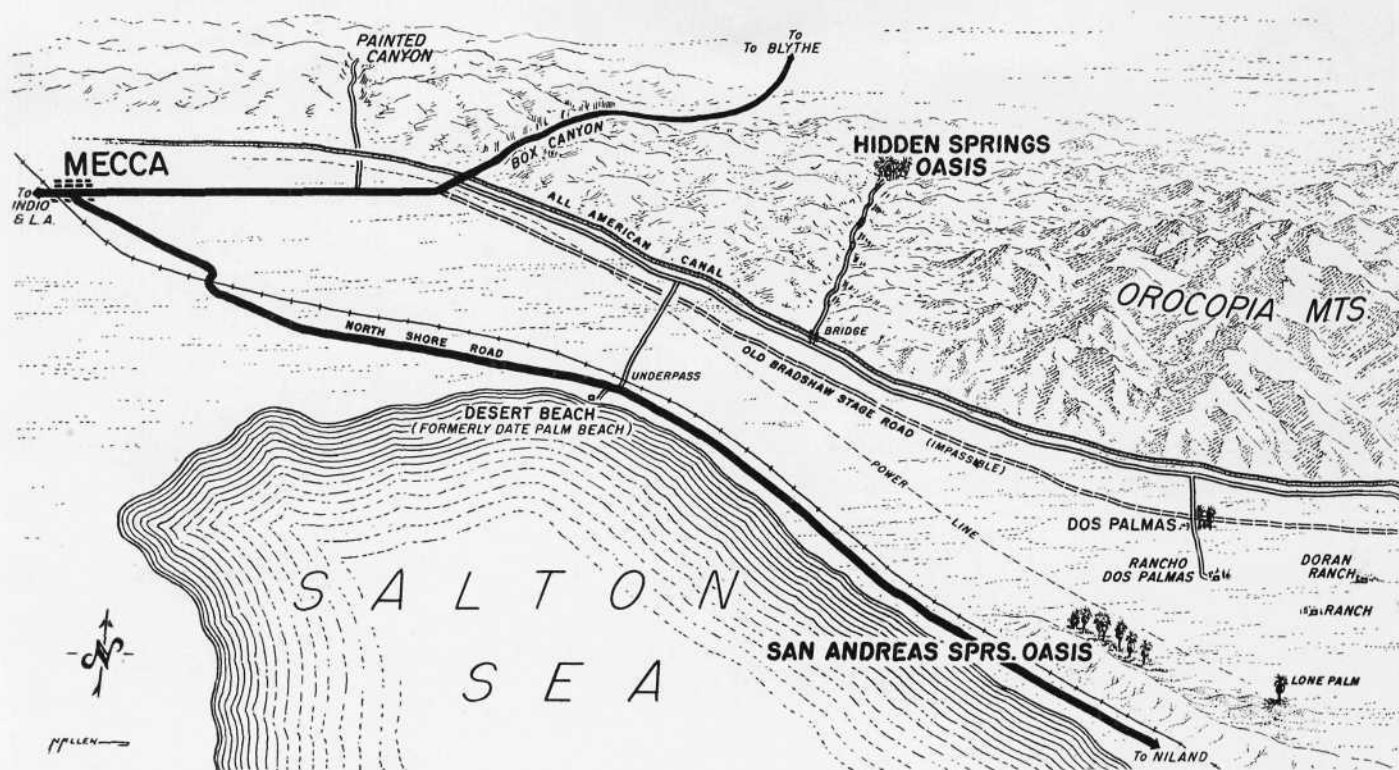
But this story is concerned mainly with Dos Palmas. For this oasis is outstanding among the historic waterholes of the Southern California desert. It deserves a chapter of its own.

For nearly 100 years—perhaps longer—the dark fronds of the palms at Dos Palmas, visible for miles across the comparatively level floor of the desert, have been guiding mountain men, explorers, trappers, prospectors and surveyors to this always dependable source of water. No doubt the desert Indians camped at these springs countless generations before the coming of the white man.

The two *Washingtonia filifera* palms which gave the springs their name, were mature trees when Bill Bradshaw's crew of brush-cutters and mule-skinners roughed in the road that was to carry countless gold-seekers to the gold at La Paz.

In the '90s the Orocopia mining company installed a pump at Dos Palmas to supply water for mining operations 18 miles away in Orocopia mountains. According to hearsay, the mine was never a highly profitable venture, and the last trace of the old pumping plant has long since disappeared. The sheet-iron shack now at the springs was erected by the military during World War II, and having served its purpose is now falling apart—a victim of vandal erosion. No one will regret its disappearance.

In 1906, 43 years after Bradshaw had blazed the trail, George Wharton James and Carl Eytel, the artist, following their



three burros, arrived at the springs from Palo Verde valley. Recording his visit there, James wrote in *The Wonders of the Colorado Desert*:

"Our canteens hang empty on our

shoulders. There is no more danger of thirst, for in the morning, only a few miles farther on, are palms rising out of the desert, telling of the presence of an oasis where there is an abundance of water. It is Dos Palmas, well-loved spot of desert teamsters and prospectors; the old stage-station, where two springs supply an abundance of good water so that animals and men can drink all they desire without fear . . . A small shack, which serves as bedroom, parlor, sitting-room, dining-room, kitchen, hall, reception and smoking room, stands close by the spring, which is surrounded by beautiful trees, carrizo, grass and flowers to which it gives life."

To the thirsty traveler, the springs at Dos Palmas are, as James describes them, "good water." Actually, the description written two years later by Walter C. Mendenhall and published in the U. S. Geological Survey's *Desert Watering Places in California and Nevada*, Water Supply Paper 224, is more accurate. Mendenhall wrote:

"Dos Palmas is a well known stopping place on the old San Bernardino and Yuma road, about six miles east of the new Salton station on the Southern Pacific railroad, near the clearly defined old beach line that stands 40 feet above sea level in the Colorado desert. The position of the springs is marked by two large desert palms, which give the name to the place. The springs yield a large quantity of tepid and slightly salty but drinkable water, the first to be found on this old road southeast of Mecca, which is 16 miles distant."

But while the water at Dos Palmas has given life to man and beast for countless years, this oasis also has been the scene of tragedy. Hermann Ehrenberg stopped here

overnight in 1866 and spread his bedroll under a brush ramada outside the stage station. He had \$3500 in gold from the placer field at La Paz. During the night he was shot through the heart, and robbed of



The route from Mecca to Dos Palmas spring is now marked by these signs, erected by the owner of Rancho Dos Palmas.



The author believes this is one of the original two palms which gave the spring its name.



Prospectors have been coming to this waterhole for countless years.

the money. The station keeper, named Smith, reported that the assassin was an Indian. Charles D. Poston, friend of Ehrenberg, who had camped at Dos Palmas the previous night, expressed the opinion that the station keeper was the murderer. No one ever was prosecuted for the crime. A year later the new town of Arizona City on the Colorado river seven miles south of La Paz was renamed in honor of Ehrenberg.

My first visit to Dos Palmas was in the winter of 1920 when I accompanied a group of Blythe men scouting the old Bradshaw road, which had long been abandoned, to see if it offered a more feasible route than the sandy Chuckawalla trail which then connected the Palo Verde valley with the outside world. Our report was adverse, due to the long sandy pull up Salt creek wash, east of Dos Palmas. There were three or four grown palms at the springs then, and several smaller trees. Also several mesquites. The adobe walls of the old Dos Palmas stage station had almost disappeared, but prospectors were camping there.

A few years later Frank Coffey, who had been prospecting the Chocolate and Chuckawalla ranges since 1885, built a cabin and resided at the springs until his death nine years ago. Coffey planted rare species of fish in the pool at one of the springs, some of them from China, he said. The fish were Frank's pets, and he fed

them every morning from a box of oatmeal. A short time after friends took him to the hospital for his last illness his cabin was burned, and the fish have long since disappeared.

Last October Arles Adams and I revisited Dos Palmas—and met Raymond Morgan who three years ago purchased the Rancho Dos Palmas, a mile from the springs. The ranch house was built originally as a desert guest resort. But Morgan, head of a very successful advertising concern in Hollywood, is not interested in its commercial possibilities. He maintains the ranch as a desert retreat for his staff and friends. Barry Atwater, the painter, has a little cabin there and has done some exquisite landscapes in the area. Morgan has increased his ranch to 2000 acres, including the Dos Palmas oasis.

From the standpoint of agricultural possibilities, Raymond probably has the worst 2000 acres in the Colorado desert. But he knew that when he bought it. He does not aspire to be a big shot rancher. He wanted this spot for its historic and scenic interest. There is an abundance of sun and sand and solitude out on this desert—and those things are good tonic for folks who are cooped up all week in an office in the big city—and he was smart enough to know that, and had the means to do something about it.

Raymond told me Dos Palmas is to be preserved in its natural state, as a historic

landmark. His ranch is cut with barrancas, spotted with sand dunes, and covered with salt flats and boulders. And that is just what he wanted. There's a dry lake that makes an excellent runway for airplanes, the rocks are good building material for barbecues, stone walls and cabins, and the dunes are covered with the shells left by the marine life of ancient Lake Cahuilla. The old beach line which runs across the ranch contains artifacts of a prehistoric Indian culture. And there are more springs than he has been able to count. When the colossal pressures which created the San Andreas fault were heaving and twisting the earth's crust they did an extra good job of shattering the rock massif that underlies this terrain, and as a result, springs bubble to the surface all over the place.

Today the original *dos palmas* have increased to *veintisiete*—and that is 27 if you do not speak the language of the Mexican who first gave the oasis its name. I believe the original two palms are still standing. I cannot be sure of them, but two of the 27 are fire-scarred veterans which have the appearance of having lived 75 or 100 years. A majority of the trees are comparatively young, and my guess is that under the custodianship of Raymond Morgan their numbers will continue to increase.

The springs at Dos Palmas are surrounded by a dense growth of tules, and, as Walter Mendenhall wrote, the water is



Rancho Dos Palmas where Raymond Morgan and friends come to relax.

a trifle salty. But Frank Coffey assured me more than once, "It is the healthiest water on earth—puts mineral in your system. Look how my fish thrive on it."

Silhouetted against the skyline two miles southwest of Dos Palmas is another oasis—San Andreas springs. There is no road to this group of palms. Several months ago I tried to drive across the desert to get a close-up picture of the San Andreas palms—and riding through the undergrowth I encountered one of those springs. My car stayed there until the folks at the rancho pulled it out with a tractor several hours later.

But Arles and I were in a jeep this time. We reached the oasis without difficulty, and found the palms growing in a thicket of tules which mark a series of springs, obviously extending along the fault line.

Just east of these palms is a long sand dune which bears out the theory of geologists that dunes may be the indirect result of a fault in the earth's crust. The explanation is that water seeps to the surface through the fracture and provides moisture for a heavy belt of vegetation. The trees and shrubs serve to retard the blow sand which sweeps across the desert and gradually a dune is formed. Water is still coming to the surface of the dune I refer to, and it presents the novel spectacle of a great hill of sand covered with a thick growth of grass and shrubs. This is an-

other of the interesting phenomena on Raymond Morgan's 2000-acre playground.

Arles and I climbed a low ridge just south of San Andreas palms and found a section of railroad grade probably built by Southern Pacific in 1906 and 1907 when its engineers were fighting to keep the tracks above the rising waters of Salton Sea. According to George Keenan in *The Salton Sea*, the railroad company moved its tracks five times during 1906 as the runaway Colorado continued to pour its flood into the Imperial basin and the sea level rose as much as seven inches in a day.

TWO DOS PALMAS OASES

There are two Dos Palmas oases on the Southern California desert. One of them is on the north slope of Santa Rosa mountains at an elevation of 3500 feet (see *Desert Magazine*, Nov. '45). The Dos Palmas described in the accompanying article is much better known and is the oasis generally referred to when you hear desert people speak of Dos Palmas.

Eventually the breach through which the river poured its torrent was closed, and the grade above San Andreas oasis was never used—but it remains today a well-preserved reminder of that historic battle between man and a mighty river.

We counted 16 vigorous natives of the palm family at San Andreas, and then made an inspection tour of the Rancho Dos Palmas—a tour in which the little jeep was called upon to do everything except turn somersaults. It took us over dunes and across terrain slashed with barrancas and pitted with craters. I am sure Raymond Morgan's jackrabbit farm will never be overrun with rubberneck tourists.

The Coachella valley extension of the All-American canal now cuts across the desert a half mile above Dos Palmas oasis. Doubtless the time will come when many thousands of acres along the bajada which extends from the base of the Orocopia and Chocolate mountains to the north shore of Salton sea will be brought under cultivation.

But Raymond Morgan has given assurance that the historic oasis of Dos Palmas is to be preserved as a waterhole where the thirsty traveler may always find refreshment—just as it was in the days when Bill Bradshaw and Frank Coffey and the great fraternity of frontiersmen whom they symbolize came here to rest and fill their canteens.

There are snakes and snakes. A few of them carry poison that is deadly to human beings. But most of them not only are harmless, but they are true friends of man. Here, a mining man tells his experience on the Nevada desert with two members of the kingsnake family.

My Friend Bill, the Kingsnake

By ADDISON N. CLARK

AT HIGH NOON of a hot May day I sat on the bed in my tiny cabin on a Nevada desert mining property I had been surveying. I was lacing my rattlesnake-proof high boots and wondering why I had seen no rattlers around the camp. Last August I had killed two beside that same cabin, and one down the road.

As I pondered, the answer emerged from beneath the bed—a beautiful five-foot kingsnake. Silently he crawled past the foot on the floor, went behind the stove, and curled up. I quietly tickled him with a bit of kindling, and when he started out the cabin door I held him with the stick while I called my associates to come and look at what I explained to them was the rattler's nemesis.

"Jimmy," as I christened him for the duration of my field work there, was becoming irritated and squirmed a bit, so I released him. He promptly slithered under my cabin floor—where I was more than happy to have him camp, because as long as he was there I knew I'd have no visiting rattlers nor sidewinders.

Reason for my introducing the group to "Jimmy" was that three days previously my mine-owner client, a city-bred Californian of 70, had beckoned me aside as I came in off the job and whispered (to spare the nerves of the lady member of the party, who had an allergic horror of all snakes and lizards) that he had slain "a little young rattlesnake—so young he didn't have any rattles at all," that afternoon.

"Heavens!" I said. "Show me the reptile!" I had a hunch. He led me to the foot of the mine dump, showed me his quarry—still slightly squirming, its crushed head beneath a flat rock. It was a beautifully-marked young kingsnake.

Of course, though it was then too late to save a useful life, I explained kingsnakes and their ways to the old gentleman so graphically that I knew he'd never slay another one.

Exactly 18 years before, in 1928, while I was superintendent and engineer of a California Mother Lode gold mining property up in the Eldorado county foothills, and living in a rude cabin on the bank of a creek between Greenwood and Georgetown, I actually imported a six-foot kingsnake to rid the cabin's vicinity of rattlesnakes. The rattlers were thick in the Sierra foothills in that hot Maytime, and I all but slept in my knee-high boots.

A patrol of Boy Scouts from an Oakland troop, eight strong, was camped with the assistant Scoutmaster on the hill above my camp. Some of the boys were interested in mineralogy. Two of them were preparing for Eagle Scout merit-badge tests. As I was a Scout advisor I had plenty of company in off hours. The Scouts were snakewise too, and I explained my problem. They and I had the same idea at the same time . . . to find a kingsnake.

Next day they took a patrol hike over to old Spanish dry diggings, taking along an extra flour sack "in case." A couple of



Lampropeltis getulus californica—the Kingsnake.

days later, as they were leaving for home, a detail of four de-toured down my camp trail swinging the sack as they hove in sight. And I knew what caused the bulge in it.

With four pairs of Scout eyes watching, I quietly rolled down the top of that sack beside a little pool of piped spring water at the corner of the cabin porch. Cautiously the contents poked out a sleek head and took a wary look around—including a quiet stare straight up at me. Then Bill, as we christened him, crawled out—a good six feet of beautifully-ringed kingsnake. He flashed a tongue in and out a few times, investigated the cool water in the little pool, and forthwith headed beneath the porch.

And I knew I would not see any more rattlesnake tracks crossing the dusty trail.

The following Sunday the top officers of the corporation operating the mine, drove up from San Francisco to look things over. Since I was bachelor-chef as well as engineer and superintendent, at noon I was preparing a lunch for the four of us. As I was putting things on the table under the huge pine tree by the cabin, I heard a yell from the vice-president—who was a city lawyer with ceiling-zero knowledge of woodcraft and snakes in general, and of mining in particular.

"Hey!" he howled, grabbing up a big rock. "A snake!" And he took stance to project said rock at . . . at my pal, Bill the nemesis of rattlers! Bill himself, disturbed by the unusual noises on his roof, had wriggled out from under my porch to see what it was all about, and there he was—a beautiful target for the barrister's boulder.

I jumped between Bill and the lawyer and told him bluntly to lay off my snake . . . "My snake!" I repeated.

"Hell—a snake's a snake to me!" he retorted, and was about to annihilate Bill. I knocked the rock out of his hand and told him that if he harmed the snake I'd have to chuck him into the creek—or worse. The other company officials, knowing there was no love lost between the V-P and me, looked on with mixed emotions and knew that there must be some good reason for my action. I explained my loyalty to Bill.

"I—I guess he means it!" said the V-P. I did mean it, for Bill not only had kept the rattlers away but he had rid my cabin of the mice which formerly devoured my food and kept me awake at night.

And so, my friends of the desert byways, if you don't already know a kingsnake when you meet one, familiarize yourself with this ally of the reptile world, and next time you meet one, make friends with him, or her—I cannot tell you how to figure which is which.

Unfortunately, there are many species of kingsnakes, and they do not all have the same markings. The ones I met in Nevada were banded with ring-markings. Most of the species are banded, but a few of them are speckled, and there is one glossy black species in California, a narrow-white band running along the full length of its back. When in doubt—if the reptile you meet has neither rattles nor a diamond-shaped head—give the snake the benefit of the doubt.

Don't forget either, that where kingsnakes are, rattlesnakes ain't; and if you do forget that, and become jittery and kill a kingsnake, I hope its spirit haunts you the rest of your days.

Indians living on the Great Rock of Acoma in New Mexico are not noted for their hospitality to strangers. Generally they are aloof and distrustful—and it costs you a dollar to go up the trail to their pueblo. But behind their mask of austerity, they have the same warm hearts as human beings around the world—as you will discover when you read this story by Dama Langley.

Trail to Acoma

By DAMA LANGLEY

Photos, courtesy
U. S. Department of Interior

THERE is a perpetual feud between the Pueblo of Acoma and the tribesmen of Laguna pueblo 16 miles away. It dates back nearly to 1629 when Father Juan Ramirez arrived on the 350-foot flat-topped rock where the Acomas live to found a mission. He brought with him a rather grotesque painting of Saint Joseph as a gift from King Charles II of Spain to the Indians.

The natives believed that Saint Joseph had endowed the painting with miraculous powers. It brought bountiful harvests and made the livestock fertile.

The Lagunas, troubled with drought, epidemics, floods and other calamities, asked to borrow the picture to see if it would change their luck. Prosperity followed, and they were reluctant to return the magic painting. Thus began a controversy which finally was settled by the supreme court in 1857 when the Acomas gained permanent possession of the picture.

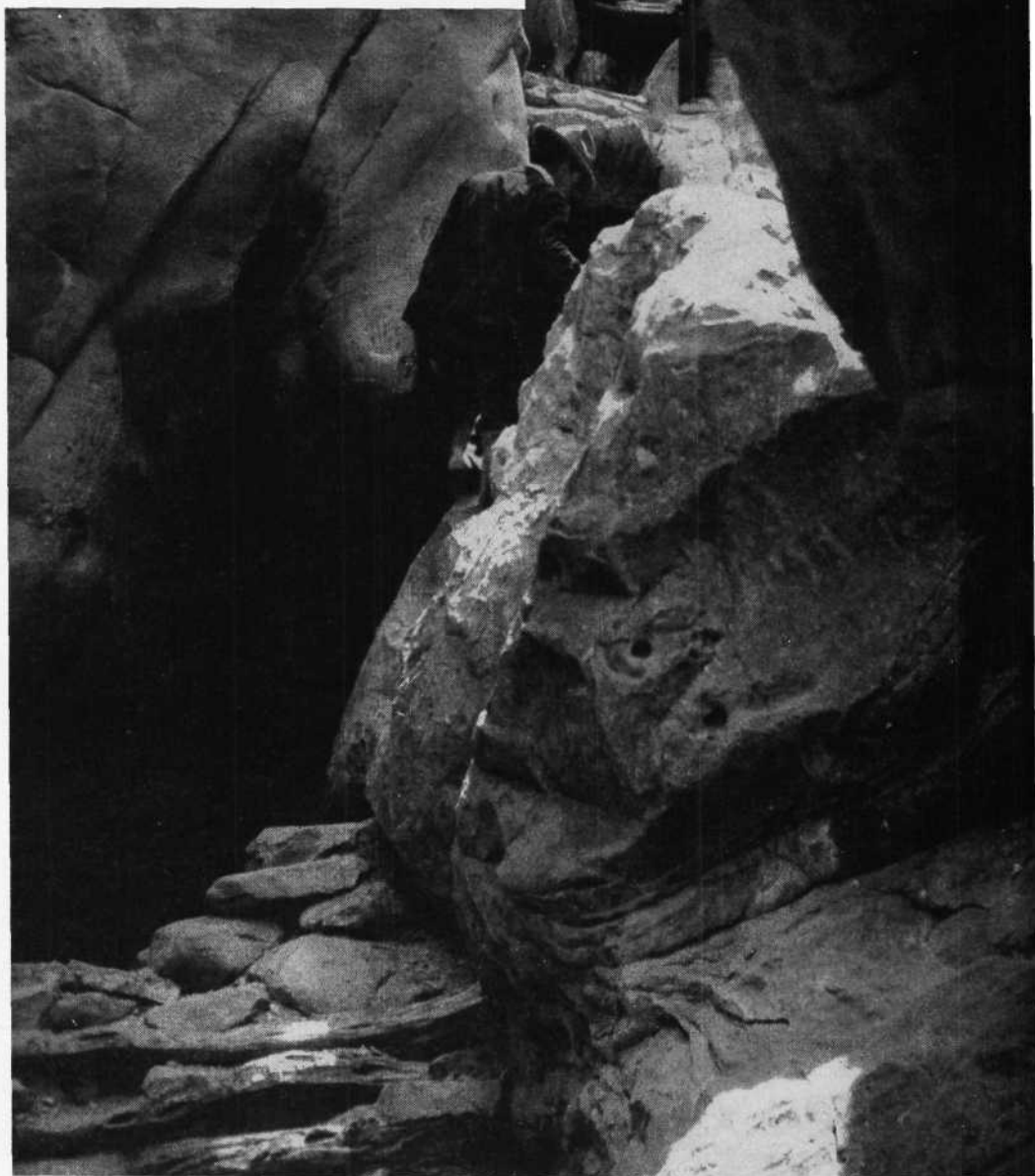
But bad feeling still exists. The Acomas not only distrust the Lagunas, but I suspect this distrust extends to all other tribes and races.

Knowing all this, it was with reluctance that I heeded the request of my Laguna foster child Toli, whom we call Squaw-poose, to drive across the desert and show her The Rock, the name given by other Indians to Acoma.

It was the last day of the year and a snowstorm hovered over us as we left Highway 66 to follow the trail that led to Acoma. It was a sandy trail, the sort of desert road that is here today and gone tomorrow, buried under shifting sand or washed away by a sudden summer deluge.

Just out of sight of the highway we overtook an Indian in uniform laboring along under a heavy duffle-bag. He gratefully accepted our offer of a ride, and settled himself beside the little Indian girl with a grin. They exchanged several remarks in their Indian tongue.

"He's going home for good," she interpreted the conversation. "His name is Tomas and he was a paratrooper. He's been gone more than three years, and his people



Old trail to Acoma. Today there is a better route to the top of the 350-foot rock, but the governor's wife will be there to collect a dollar before you reach the top.

will be surprised to see him. He says every day while he was away he waited for the time when he could come home." While she continued her conversation with one of her own people, I recalled my last visit to ancient Acoma and the tragic Enchanted Mesa toward which we were driving.

It was summer then, and we had no thought of the war that was ahead. I could

almost see the heat waves of that stifling day as I waited below in a car while a mountain-climbing companion sought to disprove the legend that Enchanted Mesa is invulnerable. This Enchanted Mesa is six miles from present day Acoma, and was the original home of the tribe until, if we are to believe the legend passed down through many centuries, a great storm or

earthquake came and destroyed the only trail by which the Indians could reach their shelters on top of the rock. Most of the tribe were in the fields below or hunting in the distant mountains, and escaped disaster. But half a score of less active ones were marooned without food or water and they died there on the mesa top, while their families milled helplessly around the base of the cliff.

The Acoma lad began to talk of his childhood, and when we reached the big gaunt mesa, he said he and two pals in a spirit of bravado once tried to climb the rock. They knew that evil spirits hovered around there and took the shape of owls when darkness came. "We knew our fathers would be very angry, but we dared each other and then we started up the side. I was so scared I wouldn't stop and I went so far up I couldn't get back. I did just such things in this war, too. I guess we never really grow up!"

"But how did you get down?" The eyes of Squawpoose were round with suspense.

"The other boys were frightened and they ran to the fields for my father. He was pretty wise, so he left me there until all the owls were cutting the dusk around me. When he did get me down I thought I had been punished enough, but he took me down into a kiva and the Medicine men burned piñon cones under a blanket and made me keep my head under it until I was almost choked with the oily smoke. I could taste that punishment for years!"

We had reached the desert below Acoma, and it looked very grim. No wonder Alvarado passed it by in 1540. Acoma is not a hospitable town, and why should it be? Its first "civilized" contact was with Spanish marauders, the Conquistadors under the leadership of Espejo in 1581. At that time according to a journal left by the invaders the Acomas had a snake dance in which they danced with the reptiles wrapped around their arms and necks but not in their mouths. This selfsame journal solemnly declares: "This Indian pueblo keeps a monstrous serpent housed in its own special chamber where it is fed once each year with great pomp and ceremony. It is worshipped and children are sacrificed to it."

Part of that lurid report is borne out by the fact that Acoma did keep a huge rattler for many years, but it escaped from its cage and was killed by a freight hauler. Intervention of his friends saved him from being mobbed by the Indians.

In 1599 Acoma was attacked and partly destroyed by the Spaniards. Seventy soldiers managed to reach the top but every one was either killed or wounded. Through the rebellion of 1680, and the final conquering by a siege which starved the Indians into accepting Spanish priests, they continued to spit defiance at the King of Spain. Oñate naively complains in his notes: "Each time we revisited Acoma it

had to be reconquered for his Most Sovereign Majesty, and the ungrateful savages converted to the true Faith!"

We parked the car at the bottom of the sand trail which is the easiest of the four routes to climb, and knowing the boy's impatience to get home we told him to go ahead and we'd take our time. He skirted the cliffs still showing smoke stains from the Spanish cannon, and went up the trail called "El Camino del Padre" constructed by Fray Juan Ramirez. This Father used to trudge the 150 miles on foot from Santa Fe to conduct mass for the Indians. I've gone up that trail once or twice, but chose to ignore it this trip. It begins with big flat rocks wedged in place for steps and finally tapers out to hand and toe holds cut in the solid rock. So we chose the sand trail up which we struggled, sinking ankle deep in the sand.

"Look, they're coming to meet us!" Squawpoose rejoiced at the hospitality of her "people" but I had my own suspicions as to their motives. Sure enough both women began talking at once when we met. There is a charge of \$1.00 for use of any trail to the village and each one demanded payment. One's husband had been governor until that day and she thought he should have credit for the collection. The other said her husband was the new governor and we were his first visitors. I told them I would sign my name in the official pueblo register and pay the toll to the book's custodian. They grumbled as they followed us on up. Squawpoose said they were discussing the wisdom of trying to collect for her, obviously an Indian child!

When we stepped out on the windswept rock at the top of the trail the desert below us was blotted out by a whirling blanket of snow. I began to regret my impulsive journey to the isolated village and to wonder where my Squawpoose and I would find shelter. It was a senseless worry. Our soldier boy and his plump comely mother hustled us into their home, and the storm with its terrors was shut outside. That was the beginning of three days so filled with friendship and peace I completely revised my opinion of Acoma hospitality.

There was a constant procession of neighbors coming and going, all anxious to hear what Tomas had to say about the lands across the sea. Others sought information about their own boys, several of whom were taken captive by the Japanese on Bataan. I was about to leave the house, taking Toli with me, when an old man and a pretty girl were seen coming across the plaza.

"That's Albert's father, and Rosena, the girl he was to marry. I wish I didn't have to tell them how he died!" Tomas turned a distressed look on me. Already he'd told me how Albert, also a paratrooper, had been dropped behind the lines with him, and how he was captured and tortured by the enemy.

"Don't tell them about the torture!" I urged. "Just tell them he was killed behind the lines." Then I slipped out to the ghostly old mission, whose history alone would fill volumes. While Squawpoose solemnly explored the tunnel-like archway which surrounds three sides of the big church I sat in the little balcony where ill fated Friar Baltazar loafed and gloated over his self-built empire. This great fortress was not built for the glory of God but as a monument to the egotism of a very worldly and wicked priest. In its building Spain reduced the happy free Indians to an enslaved tribe of bitter sullen laborers.

Every stone, every huge beam, every handful of soil filling the walled garden and the burial plot in front of the church had to be brought up heart-breaking trails by tortured human beings. I looked at the last dying peach tree, all that remains of the once famous garden, and remembered how each Indian woman was required to supply two gallons of water daily to nourish the rare fruits and vegetables the priest planted in that garden. Then I walked along the rim of the mesa and tried to select the exact place over which just at moonrise, his weary parishioners pitched him! I wanted to erect a fitting monument there. This story is told by Willa Cather in *Death Comes to the Archbishop*.

"What are you looking for." Tomas had approached so silently he was beside me when he spoke.

"I'm trying to find out where Padre Baltazar was launched into space."

Tomas looked all around. We were alone. "Come, I'll show you." We sauntered along the rock's edge and as we passed a place which overhung a desert strewn with jagged rocks he carelessly waved his hand as though we were discussing an aerial battle. "This is where the men stood while they swung him back and forth a few times and let loose of him. Glance down and you'll see prayer sticks set among the rocks. That spot means as much to us as the Statue of Liberty to your race."

"Were you homesick for Acoma while you were across?"

"Was I! There were a dozen of us, Navajo, Jemez, Walapais, some Hopis, and Albert and I in our company. The white boys treated us just fine and there were times when we felt white, but in the night time or on the days mail from America came to us, or if one of our race was killed, we were drawn together into a little group, all Indian in thought and feeling. You'd be surprised to know that many a Baho stick was made and planted when we sensed that an attack was coming! There were times when I wished that I had been trapped by the Medicine men so I'd have more powerful magic!"

"How do you mean trapped?"

"Just that. No Acoma boy willingly joins the Medicine men. In order to have their full quota of initiates they resort to all

sorts of tricks to get boys into the profession. The Medicine men are hated and feared. In case a young man meets a Medicine man both sit down hurriedly. They sit for hours staring silently at each other. Whichever weakens first loses, but usually a Medicine man has more pressing duties than a young man and has to get up and leave. There are other ways of trapping members, however, and there's always the element of chance. If the boy happens to step in ashes sprinkled hopefully around the pueblo or in certain spots where the trails start there is no way out; that careless youth has to join the Medicine clan. The old men snoop around and examine our moccasins or shoes at unexpected times hoping to catch us before we have a chance to brush the evidence off. The sacred ashes are mixed with a certain powdered clay which clings so tightly it's hard to get off."

"Did you ever get caught?"

"Yes, but I tricked the old fellows. You probably know that the question of fuel for fires up here on the Rock is a very serious one. No man, woman or child going down onto the plain comes back up any of the trails with empty hands. They carry any sort of twigs or dried roots or sticks of wood they can find. I can remember how my mother always dreaded a storm such as this because the wood might run out and her children be cold. So, when I was about 16 and went up into Colorado to work in the sugarbeet fields I didn't mind the long hours or hot sun. I had plans. I was paid almost \$40 for the work and when I got back to Gallup I went to a coal mine and bought a truckload of lumps of coal for my mother. The coal dealer agreed to deliver the coal at the foot of the Burro Trail and you may be sure I had my mother there when it was unloaded. She was the envy of every woman on the Rock. They all begged to help carry it to the top, but since they expected a portion for their services my mother and I carried it. She's never been without coal since, and while I was in the army I made her promise to spend a little of her allotment check for coal when she needed it." He lost himself in his proud memories and I had to remind him that he had tricked the Medicine men.

"O, yes. Well, you see I had a sweetheart and we got into the habit of wandering out each evening to sit where we could look out across the valley to the Enchanted Mesa. One night there was a great gilded cloud massed behind that mesa like a second city in the sky and we were so busy looking at it I forgot all about traps, until Kadah gave me a quick push, 'Look what you've done. Now you'll have to be Yokemaha's (the head priest) helper!' I looked at my black store shoes and they were planted in a trap of ashes.

"Kadah shoved me back onto the path



Main street in Acoma.

and smoothed out my tracks with her moccasins. A girl can't be a Medicine man, and she was safe." I murmured agreement and he went on, "She is quick as lightning when she thinks, and she hurried me back to where my mother stacked the ashes from her coal fire. She saved them to scatter over the melon hills in the summer time. 'Step in those ashes,' Kadah ordered and I waded in until my shoes were white. And do you know those coal ashes stuck and looked just like the sacred medicine trap ashes? That sure was a narrow escape!"

"Where is Kadah now?"

"She's getting her wedding dress ready! Tomorrow we will be married by the Medicine man we fooled. And when the Priest comes again we'll go into the church and let him marry us too. We won't mind and it will please him!"

"Why are your Medicine men hated here? My Hopi friends are proud of their healers."

"Here the Medicine men select their own patients, and you may be sure they always pick out one that can pay well. They hold healings twice a year. When they see their supplies growing low they go into each house and drop a pinch of meal in the palm of the man living there. That means the best ear of corn from the hidden store room must be given to place before the altar in Medicine kiva!"

I interrupted him, "I haven't seen any kivas up here. Where are they?"

"Our kivas are in the very heart of each group of homes. They are completely surrounded by rooms, but the walls are so thick no sound gets out. The smoke goes out through the ladder hole, and the only way to get into a kiva is down a ladder. In one kiva there is a fire burning which has

never been allowed to go out since this village grew on the Rock.

"Not only must the best ear of corn be placed in the kiva, and we all know the Medicine men get them instead of invisible gods, but the women have to share their strings of dried peaches and melons and mutton jerky and chili. They even have to divide the dried cactus apples, put away for puddings, with them.

"Some ears of corn are wrapped in eagle feathers and handspun cotton strings. Others are trimmed with seashells and bear and eagle claws, and these ears of corn are laid on top of the Medicine men's kiva. A bowl of water is brought up and the chief Medicine man looks down into it for several minutes. Then he calls a name and the other Medicine men go into the crowd of watchers on adjoining housetops and bring that person along with them to the chief. No protests are heeded. The selected man has no more chance to get out of being treated than I did when Uncle Sam said he wanted me to fight. The patient is seated there and all the people listen to the healing songs which are repeated four times, then the healer explains that he saw a face in the bowl of water and it belonged to the man they have chosen.

"The healer has one hand covered with the skin and claws of a bear's paw, and in his other hand he holds two wing tip feathers from an eagle. First he scratches the patient with the bear claws, then strokes him with the eagle feathers. After some minutes of this the healer leans over and pretends to extract the illness by drawing a very deep breath. Believe it or not, the healer always manages to show a spider or a long cactus thorn, or sometimes a lizard, which he claims came from the patient. This object is dropped into the ever burn-



Today's improved trail to the top of The Rock.

ing ceremonial fire, and all the patient has to do from then on is pay!"

"I thought spiders were considered something special here on Acoma."

"They are. Maybe you've seen when one is killed by a housewife she addresses it, 'You were killed by a bluebird' before she thumps it to death with a stick. If she didn't do that she'd be witched. The Medicine men claim their patient has unknowingly stepped on a spider and it caused his sickness.

"You can see why we younger men dodge that clan. We can't believe such foolishness. Trapped young men are kept for four days in the kiva without food and they are taught all the tricks of the trade. They are taught the uses and powers of herbs and magic of the rounded chunk of shale which a snake passes now and then in lieu of its egg. When any Acoma dweller finds a snake coiled around the two or three chalky 'eggs' Medicine men are hurriedly summoned. If an outsider accidentally touches a bit of the substance he has to join the Medicine men's clan." Tomas stopped talking and pondered a few moments.

"Do you believe in lucky tokens?" he finally asked. I touched the Virginia Fairy Stone on its thin gold chain around my neck before I answered.

"Well, yes, in a way I do. At least I believe in the feeling of comfort one gets from the nearness of any object cherished on account of sentiment or association. Why?"

"When Acoma boys are about eight years old they are taken into a society, and the *cacique* teaches them our legends and beliefs. We learn about our gods and the

things we should do and not do. Each boy is given some sacred personal words never to be uttered aloud, not even while in prayer on a lonely mountain top. We are also given some small object which is to protect us throughout life and go into the grave with us. This can be a stone rounded by years of wind and rain, or an animal carved from turquoise or soapstone. Mine—I shan't say what mine is, it never left me during the months away from here, and when my first son is born it will be tied to the fringe of his *tablita* (little cradle-board) until he has a talisman of his own—then it's mine again. I believe Albert would have come home safely with me, but he lost his name object just before we were dropped behind the lines."

Tomas' mother came and said we would eat. She walked beside her soldier son and he smiled down on his mother, proud in her snowy wrapped leggings, her short full dress and lace trimmed petticoats. She was weighed down with silver and turquoise jewelry donned in his honor. A bright silk handkerchief, brought with him from overseas, covered her smooth black hair.

The room was cheerful with its blazing coal in the corner fireplace around which hung twisted strings of dried melon, colored corn, peaches and chili peppers and colored gourds. The mantel was crowded with Acoma pottery, thin and fine tempered and decorated with the conventional parrot design done in red and black on white background. Every parrot had an enormous curved bill.

The supper table was drawn close to one of the ledges running entirely around the room. These ledges are padded with wool

filled quilts over which are spread priceless old blankets, doubtless woven by the men in their hidden kivas. They serve as seats in the daytime and couches at night.

Squawpoose accepted the hot sauce which our hostess poured over the tender fried mutton, and when I saw how its peppers brought tears to the eyes of those eating it, I took my sans sauce! We had potatoes baked in the hot coals, and crusty white bread broken from the loaf baked in the outside oven. Coffee and home canned peaches gave a satisfying finish to the feast, and while I helped our hostess clear things away Tomas and his sweetheart went to the family cistern for jars of water. This cistern was chiseled out of the solid rock many years ago by the grandfather of Tomas who worked while he waited for his sweetheart to make up her mind to marry him. She gave him plenty of time to finish the cistern before saying "Yes." I often had gone with the women to the pueblo reservoir, and admired the way they dipped their ollas in the water and carried them home on their heads. For some reason water is carried just at sunrise or around sunset.

Tomas will inherit the office of *cacique* from his father. This officer is the only man in the village exempted from manual labor. He is expected to spend his time in prayer and meditation so he can give sage advice to his people. I suspect Tomas will not take his loafing duties seriously.

Morning came after a rather sleepless night on the stone ledge. I was afraid to move for fear I'd tumble onto the floor! The family was up early preparing for the wedding, which was the most sensible service, Indian or white, I've ever listened to. The old Medicine man simply placed Kadah's hand in that of Tomas, laid his own above them and talked to them quietly about their duty to each other and to their people. He extracted a promise from them to deal fairly with each other, to work together in harmony, and to bring many babies into the Acoma world. Beside me the sweetheart of Albert caught her breath and slow quiet tears ran unheeded down her cheeks. My tender hearted little Laguna took her beloved "Big Bad Wolf" hanky from her pinafore pocket and tucked it into the girl's hand.

Tomas and Kadah walked down the trail with us, and pointed out the spot where they stepped into the Medicine man's ash trap, and over against a hill not far from the Enchanted Mesa showed me where he plans to build them a home of pine logs.

"It was for this I lived when there seemed no chance, and it's what I came home for!"

Acoma soil is rich. It is a good cattle country, and I have no fears regarding the ability of Tomas and Kadah to build a satisfactory life for their coming sons there in the shadow of The Rock.



"Mother and I examining fluorite in an old mine dump."

Rock Hunter in the Sawatch Range

Helen Anderson once wrote a delightful story for *Desert Magazine* readers of her life as a miner's wife in the Funeral mountains overlooking Death Valley. And now the Andersons are timbering in southwestern Colorado—and Helen is finding the hillsides covered with gems and minerals of many species. Here is a story that will make the rock hunters want to load up the car and head for Colorado.

By HELEN ASHLEY ANDERSON

SUNSHINE floods the canyon as clouds hover above the snow covered crest of Antoro, and a mild wind whips the branches of the aspen trees in back of the old two-storied log house where we live in the hills of southwestern Colorado.

I just came inside with several pieces of rhodochrosite broken from a huge chunk the color of the pink sweater I am wearing. These specimens are for exchange with the new friends I have found through *Desert Magazine*.

Rockhounding is only spare-time activity, however, because my husband, Clinton, has gone into the timber business and I help out where I am most needed. When I find the time I go rock hunting.

Around here there is the prospect of finding anything from a geode to gold—and all within walking distance!

We are in the Sawatch range on Kerber creek 10 miles above Villa Grove. The remains of the old mining town of Bonanza lie above us waiting for a new boom. Leasers keep up the morale of the camp until that time comes.

Clinton and I, having been in Death Valley and Arizona often during the past five years, are now taking out timber from the Rio Grande forest at an altitude of 10,000 feet.

This is beautiful country and as green as the desert is brown, but it is a part of the great Southwest where the Indian lived long before white men knew its beauty.

There is plenty to remind us that the Indian lived here before we came. We can pick up manos, metates and arrow points up and down the creek where the beaver



Ranch house in southwestern Colorado where the author and her husband are living while taking out timber.

play in huge dams that back the water up over land where wild strawberry plants and the raspberry bushes crowd the gooseberry and the chokecherry locked among the haws and alders.

The wild rose and the shooting-star vie with columbines, and violets run riot among the grasses where a hundred other wildflowers grow.

Here in Saguache county (the name means "Water at the blue earth" and is pronounced Sawatch) we often see deer, elk, bear, lions, coyotes, bobcats, skunks, porcupines and an occasional fox. This morning we saw four deer feeding along the back fence.

The bluejay takes the place of the red cardinal and the chipmunk is as friendly as the lizard, and although we live in the high hills we are lucky because we are able to do essential work and be rockhounds too!

One day before the snow came, Mother and I took our prospecting picks and drove two miles to Columbia gulch where we parked and proceeded to climb the hill to the Faith mine in search of jasper.

The trail was steep and the air rare as we gained altitude. We nearly lost our nerve once when we saw evidence of bear but we had started out to find rocks and so we continued in quest of them by fortifying our courage with the belief that if we minded our business, he would mind his. This proved sound philosophy because we did not get a glimpse of him.

At the edge of the timber we stopped to get our bearings and saw that buffalo grass

covered an otherwise barren hill to the rocky crest. Panting our way to the top of the hill we sat on a rock to look about.

Fold on fold of hills spread away below. Across the San Luis valley the Sangre de Cristos rose high and jagged and color-stained above them all. Their clean-cut profile stretched down the miles into New Mexico as the Panamints stretch down the length of Death Valley.

The hills were taller and the cactus smaller but the vistas were painted with color even as the desert. Below us the yucas were dwarfed but the blossoms were waxy and abundant.

My eyes searched the range. Rich in lore, it always had interested me. Somewhere over there in that mass of earth was an old Spanish mine. My great uncle had come upon it some 50 years ago when he prospected the range for lead. Coming up from the eastern slope he and a friend had topped one of those majestic peaks and had come down the west side below timber line to stumble on the find that no one else in this part of the country seems to have any knowledge of. Uncle John Hice said that they were walking along not paying much attention to anything when they were brought to a sudden stop by a hole looming in the earth before them. There was no sign of a dump and the aspen trees were large and had grown to the very edge of the shaft. There was a ladder of rawhide. Peering into the depth they climbed down about 40 feet. The ladder was very rotten and insecure so they were afraid to trust it

and climbed back, determined to return at a future time. It was in the late fall and neither man ever returned to the mine. Both are now dead. Neither left a map, but they described the location and how to get there. It would be fun to find it after so many centuries of idle waiting. Since I was a small child I have heard about the lost mines of the Sangre de Cristos. I wonder if this could be one of them.

Mother pointed down the valley. There somewhere was the peak with the tiny stone crosses.

I recalled a version of the legend of these crosses. "Long ago the great Father looked down upon His people and when He saw their intolerance and their sins He wept, and as He wept tears fell to the earth and upon touching the mountain top turned to tiny stone crosses, a reminder to this day of His sorrow."

I thought: This rockhound would like to find one of those crosses.

Rested, we left our rock and started around the hill. The Faith was just below and there was chalcedony all over the hill slope. We got several specimens that were worth bringing out and placed them in our sack. One large one has since been polished. The outside matrix is a grey to mottled green and the inside agate a clear to cloudy grey. The specimen is 2x3 inches.

We found many smaller ones that will polish but this one specimen was the chalcedony find of the day.

Working our way around the hillside we picked up chunks of olivine, hornblende

and copper stained rock. We also gleaned some colorful jaspers, but only a few of them were hard enough to polish. I cannot understand what causes this jasper to crumble. It is not due to exposure because some of it was dug from the ground and never had been exposed to the air.

We never did find the stuff we were really looking for. It was a kind of jasper—hard, smooth and canary yellow. We had been given a small specimen by a man who had done a lot of prospecting in the vicinity and he assured us that there was more of it somewhere on that same hill. It is still there. We had no luck finding it that day and it was late before we finally gave up and retraced our steps to the car.

It was dark when we reached home. Clinton was there before us and he had found a nice specimen of lead enroute from the timber country.

I have obtained many lovely specimens within a few miles of the ranch. The old mines close at hand offer many and varied kinds of ore. The rhodochrosite I mentioned is three miles above here and comes from the Eagle mine. Many of these specimens found in the early days had large bug-holes of wire silver. I have not been lucky enough to find one of these but I do have one or two nice specimens with green fluorite. This fluorite is of acid quality and according to the late Dr. S. E. Kortright who assayed much of this ore, it is strong enough to eat up glass. This fluorite can be found in other locations close by.

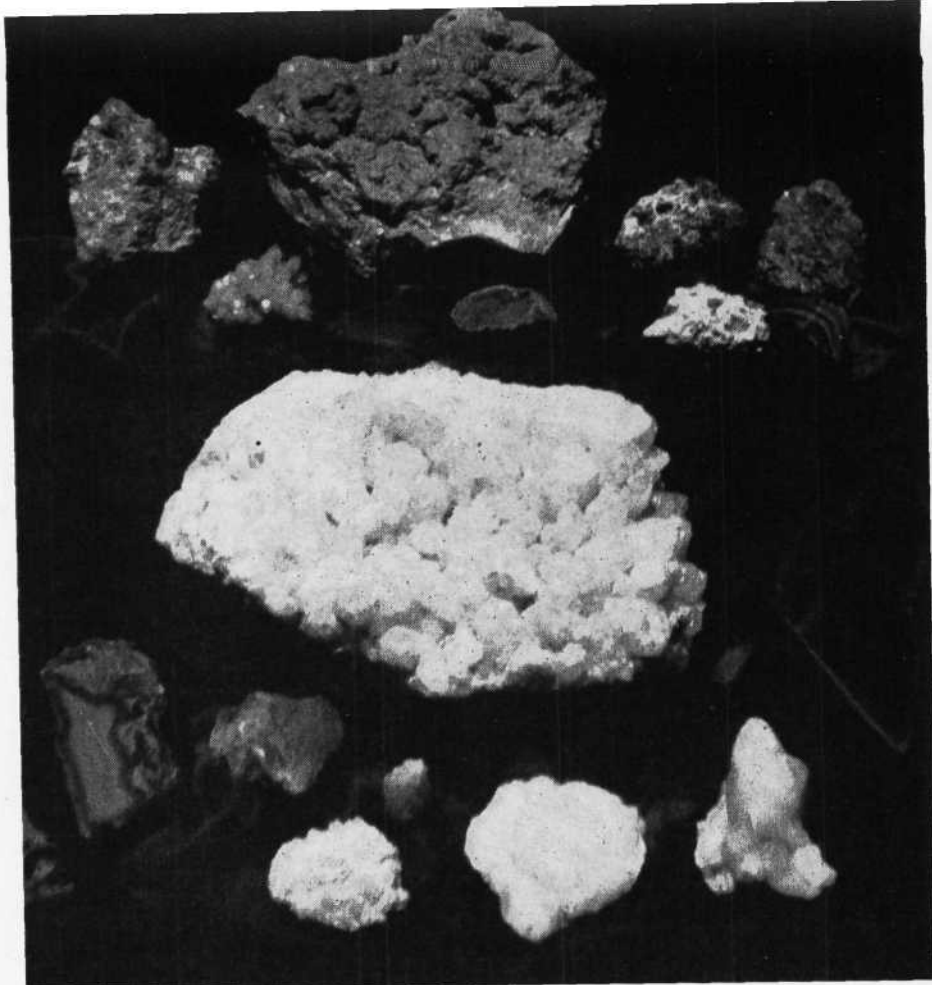
Rhodochrosite has a tendency to oxidize, or turn brown when exposed to the air but if one gives the specimen a coat of clear shellac it will remain as beautiful as it was when taken from the mine. Rhodochrosite will also polish but I believe that it is just as lovely in the rough.

Other minerals I have obtained in the vicinity are bornite, galena, gold, silver and grey copper, chalcopryite, dolomite, pyrolusite and other types of manganese. I even have a few small chips of turquoise my grandfather found, green and purple fluorite and vermiculite.

Knowing how the ore is taken from the ground I can truly appreciate the specimens I have acquired. When one stands below the surface of the earth locked in darkness except for a small light and peers into old stopes, drifts and undercuts to examine the seams from which the mineral is taken, one becomes aware of the real value of a rock Mother Earth so reluctantly yields.

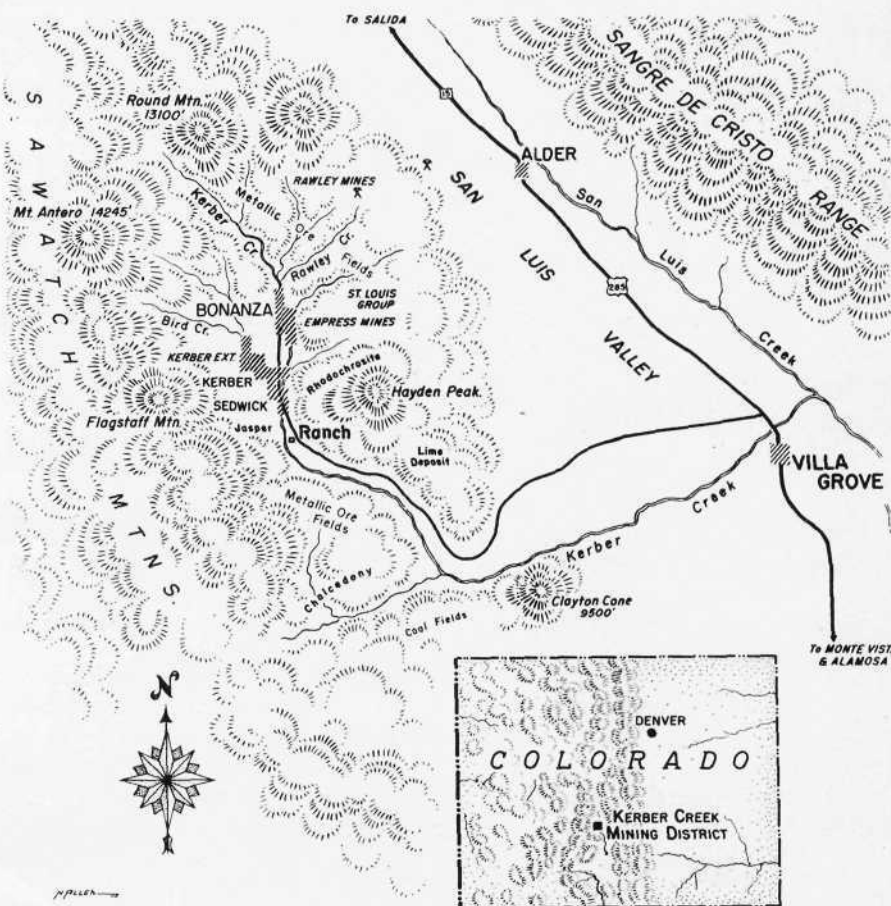
The sun is setting. Antoro and Haden peaks are stained a deep pink and the wind dapples the ground with moving shadows of trees. Clinton is driving in with a truck load of logs. They will be sawed into mine props and sent on their way to assure some miner a little more safety while he digs out a metal necessary to the well being of man.

A coyote barks and a lone owl hoots as the last of the logs are unloaded. It is eve-



Above—Rhodochrosite, purple and green fluorite in white dolomite, quartz and chalcedony. In the center is a cluster of quartz crystals. Below are chalcedony and uncut nodules and quartz crystals.

ning as the peace of the mountains settles around us and the first star twinkles in golden splendor in its field of blue above the darkening hills.





Only a few scattered, weatherbeaten buildings mark the site where thousands once worked and played.

Ghost City of the White Hills

Rich silver ore built a city at the foot of the White hills in northwestern Arizona. But that was long ago and today the streets are silent and most of the buildings gone. Only memories remain—memories, and sun and solitude, and a vast desert spread out in everchanging beauty.

By STANLEY G. DAVIS

IT WAS a lazy Sunday afternoon about three when I arrived at White Hills, Arizona, only a 35 mile drive over rolling hills and desert valleys from Boulder dam. The setting is one never to be forgotten. White Hills is nestled at the base of the hills for which it was named, with a vast expanse of desert as a front yard.

This community was first known as "Indian Secret Mining District," and was so called because tribesmen knew of the presence of minerals, and withheld the information from the white men. The Indians were using the red iron oxide to paint their bodies.

White men first learned about the minerals in this area in May, 1892, when Henry Shaffer was shown a piece of rich silver ore by a friendly Indian known as Hualpai Jeff. Jeff took Shaffer to the location and he began staking claims and working the locations.

The rock is principally light medium grained gneissoid granite and the deposits are in quartz veins about three feet in width. Associated with them locally are considerable manganese and iron oxide. The ore was chiefly chloride of silver with local values in gold, and was oxidized to the depth that mining operations were carried.

Shaffer was joined in his venture by John Burnett and John Sullivan. The three men, working together, opened many valuable pay shoots. In 1894, a 19-ton shipment of ore to the smelter produced 29,000 ounces of silver and 80 ounces of gold. This partnership proved very successful. However, they sold the properties after a short time to R. T. Root and D. H. Moffatt of Denver, who formed the White Hills mining company.

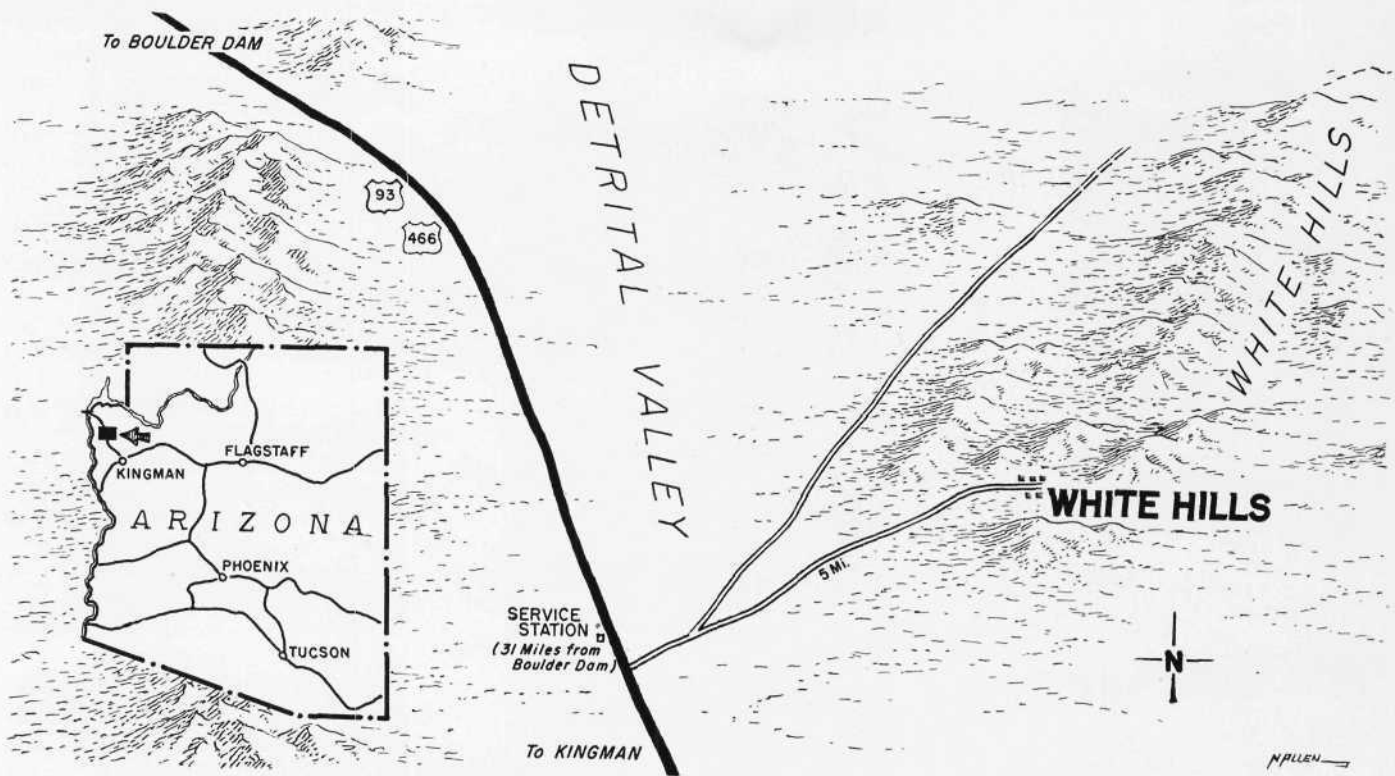
A 10-ton stamp mill was built. Coal for the mill was obtained from Kingman, but the supply was uncertain due to transpor-

tation delays. To supplement the coal, Joshua trees and Yucca plants were cut and dried, and used as fuel.

Many mines are located in this district. The fifteen most famous are: Prince Albert, Norma, Grand Army of the Republic, Occident, Horn Silver, Hidden Treasure, Good Luck, Excelsior, Garfield, Daisy, Bryan, Chief of the Hills, African, West Treasure and Grand Central. These are all within two miles of White Hills. They were worked until devaluation of silver.

How different it is today! White Hills has changed from a thriving mining community of 2000 persons to a ghost town without a single resident.

I spent an afternoon browsing among crumbling buildings and exploring nearby mine dumps. The first building I entered on the north side of the street—the main street runs east and west—was a combination postoffice, barber shop, and general store. Letter boxes, covered with dust,



leaned against the back wall, and many of the cases used in merchandising were still standing in place. The weatherbeaten walls, papered with newspaper to keep out the wind, have withstood many a des-

ert storm. They were torn and tattered. Most printing on the newspapers has long since been obliterated, but a few revealed odd fashions of the day. I found one recording President Cleveland's attendance

at a social function in Washington. A faded barber pole has survived the years to mark the location of the camp's barber shop.

Another store apparently was the groc-

Dump-scarred hills will give mute evidence of the silver rush to White Hills long after the last of the town has vanished.





Above, the pithy part of the wood has vanished but the full grain is well preserved and stands out in bold relief on walls battered by three-quarters of a century of desert storms. Below, old ore barrel of the silver era, with handwrought iron fittings, supports an equally decrepit drywasher of a much later era.

ery. There was a sign telling something about coffee. An old-fashioned tea and spice dispenser was sitting in the middle of the floor. A third building had been devoted to mining equipment, with several old pieces scattered around the floor. Two or three small houses were still standing and I saw a few hairpins and personal items.

I was most interested in the condition of the wood in all the buildings. The soft pithy or pulp part had disintegrated, but the full grain was well preserved and stood out in bold relief. The wood is weatherbeaten and shows its age, but it is still strong and durable.

An old safe was standing on two hind wheels, which were buried in the desert shale. The door had been blown off and was gone. The inside of the safe, as bare as the proverbial cupboard, was left to withstand the elements. An old ore barrel with iron ring on top had a few staves broken, but was otherwise usable.

Purple glass, the kind that has been exposed to the desert sun for many years, can be found almost anywhere at White Hills.

The mines which supported this town may be seen on all nearby foothills. It is said that White Hills had 27 miles of underground tunnels, and the diggings on the mountain sides remain as a lasting monument to those who founded this community.

Of the town of White Hills, little, except memories, remains. Standing in the silent, windy street, it is difficult to remember that one is a scant 35 miles from the bustle of Boulder dam. It is still more difficult to realize that this ghost city once teemed with human activity, as Boulder does today. But it is good exercise for the soul to come to such a lonely place and free the imagination; to recreate the past and guess the pattern of the future.

LATTER-DAY SAINTS MAJORITY IN UTAH

Majority of citizens in Utah as a whole, and in Salt Lake City are members of the Church of Jesus Christ of the Latter-day Saints, an extensive survey by church authorities shows. There are 467,524 Mormons, 74.21 per cent of state's estimated population, enrolled in L.D.S. stakes in Utah. Salt Lake City showed 113,943 members, 65.11 per cent of city population.

AKEAH NEW CHAIRMAN OF NAVAJO COUNCIL

Sam Akeah of Shiprock defeated Henry Chee Dodge for post of chairman of Navajo Tribal council, in a runoff election held November 25. Count of 72 of 74 boxes showed 4200 votes for Akeah and 2200 for Dodge, according to Navajo central agency. Dodge, as defeated candidate, automatically becomes vice-chairman of the council.

Heliotrope Wildlings

By MARY BEAL

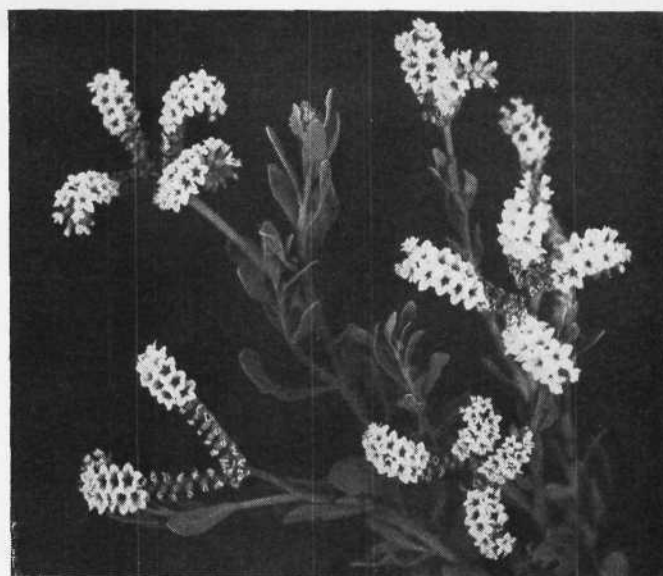
EVERYONE knows the garden Heliotrope and many of you may know these untamed members of the genus but not recognize their close kinship to the beloved plants of enticing, spicy perfume and color. They belong to the large Borage family, mostly rough and hairy of herbage, but including some other beautiful well-known, cultivated favorites, such as Forget-me-not and Mertensia. Although of no economic importance, it has modestly added a good share to the desert's carpet of annual vegetation.

There are over 200 species of Heliotrope common to warmer regions of the globe but our own Southwest can claim only a few, the most widely distributed being known as Chinese Pusley or occasionally as Quail Plant. Botanically it is classed as

Heliotropium curassavicum

This close kin to the sweet-scented, home-cultivated Heliotrope chooses a warm clime, as does its comely cousin, which originated in Peru. The variety *oculatum* is most widespread on the desert. It lacks the fragrance and the distinctive color of the garden species but flourishes abundantly in salty or alkaline soils that are scorned by most of the more showy plants and is such a persistent bloomer that it continues in flower long after the annual wildflower pageant has become a memory, all through summer and often until frost touches it with icy fingers. Being quite clannish, large clumps and colonies of Chinese Pusley populate favored areas. It seeks moist spots and is prone to follow irrigation ditches and to settle along borders of fields and waste places.

Varying from the usual habit of its ordinarily hirsute family, the pale grey-green, very succulent herbage is entirely hairless, the smooth surface lightly veiled with a bloom. Several fleshy, branching stems, more or less prostrate, straggle out 5 inches to more than a foot, sometimes as much as 2 feet, from the per-



Though lacking in the sweet-spicy fragrance of the garden Heliotrope this little cousin, Chinese Pusley, blooms abundantly in soils scorned by more showy plants, and persists long after the pageant of other wildflowers.

ennial root. The sessile, obovate or spatulate leaves are $\frac{3}{4}$ to $1\frac{3}{4}$ inches long and the small flowers are crowded into one-sided coiled spikes, 2 to 4 spikes on one peduncle. The short funnel-form corollas are white with yellow spots in the purple throat, sometimes the whole corolla tinged lilac, or purple lines on the back. The fruit is bald and smooth, its 4 lobes splitting into 4 one-seeded nutlets.

Some of the native Indian tribes and Spanish Californians valued it as a remedy for sores and wounds, using the leaves and sometimes the root, dried and reduced to a powder, which was applied as a dry dressing in the wound. Common in river-bottom sand and low alkaline flats in the California deserts and Arizona, extending into Nevada and southwestern Utah.

Heliotropium convolvulaceum var. *californicum*
(*Euploca convolvulacea*) (*Euploca albiflora*)

A novice never would associate this sprightly little posy with Chinese Pusley. A small annual of much charm and grace, its pure white blossoms are like diminutive Morning-glories, which inspired the specific name, meaning "like the Morning-glory" or Convolvulus. Because the flowers open towards evening we might liken them to Moon-flowers, which belong in the same class. It's a leafy little plant with the harshly-hairy herbage typical of the family, its branches diffuse or spreading from the base a few inches to several inches, rarely to nearly a foot, under favorable conditions.

The whole plant is hairy, frequently even hoary, not only the stems, leaves and calyx, but also the corolla, its tube being very densely hairy and the rotate border with some hairs underneath along the mid-nerves. The leaves are $\frac{1}{2}$ to $\frac{3}{4}$ inches long, mostly ovate, on short petioles, the stiff hairs around the margin of the blades like a fine fringe. The slightly-plaited, snowy-white corolla is a half inch or so broad, the tube constricted at the throat, the 2-globose fruit silky-hairy. They make a winsome appearance in the pale sand of the Soda Lake-Devil's Playground dunes area and other sandy scattered places of the Mojave and Colorado deserts, and Arizona especially about Yuma, also in similar situations in southern Utah and Nevada.

This variety of Heliotrope has little resemblance to the Chinese Pusley, but resembles the Morning-glories—hence its botanical name of Heliotropium convolvulaceum.





Kit Fox is suspicious—but that bacon grease does have an appetizing smell.

He Took His Own Picture

By LEWIS WAYNE WALKER

FIVE miles north of the Mexican village of San Felipe on the gulf coast of Lower California are volcanic buttes surrounded by rolling sand dunes. Kangaroo rats, sidewinders and desert lizards of many species inhabit the area. Some of the animals are nocturnal. They never venture forth in daylight. But

lizards often can be seen sunning themselves in the early morning and late afternoons.

We selected this spot for a campsite because it seemed to offer an exceptional opportunity to study and photograph the wildlife of the region. Picacho del Diablo's 10,500-foot peak, the highest on the

The little kit fox of the desert is a crafty animal. He has to be cunning to live off this arid land. But when food is at stake he will take long chances. Here is the experience of a naturalist who took advantage of the hunger instinct to secure a fine set of pictures of the fox.

Lower California peninsula, was the most conspicuous landmark on the skyline to the west of us. We purposely set up our camp some distance from San Felipe to avoid the horde of dogs there. They live off the land for the most part, and are bold raiders when there are campers around.

Our first intimation that there were foxes in the region came with the discovery of well trodden trails leading to the kangaroo rat holes under the clumps of mesquite on the sand dunes. These paths were not made in a haphazard way. They were definite routes, each night's tracks overprinted upon those left previously. A few of the rat holes were enlarged by fox diggings but most of them had been inspected and then passed by.

While gathering wood in the early twilight we got our first glimpse of the desert kit foxes, animals which were to become an integral part of our camp life in the nights to follow. We could see their shadowy forms just beyond the glow of our campfire. If we approached they would retreat and disappear into the darkness. After we had gone to sleep they evidently became bolder, for the slanting rays

The flash bulb frightened him—but he stood his ground, and when the trap had been reset he tried it again.

And now he has become making another effort



of the morning sun disclosed their tracks within a few yards of our cots. Every scrap or crumb of food was gone. After that they became bolder. On their return the following evening the foxes sat just outside the campfire glare as we went on with the normal camp routine. All scraps and even some of our dinner was tossed in their direction.

While feeding them in this way some interesting observations were made as to their sense of hearing. A soft piece of food thrown past them was not detected by their eyes, but the instant it landed, they jumped to the spot of sound and then used their noses for final location. Even a tiny bit of pancake tossed a score of feet away drew their attention although the sound of its landing was inaudible to us. These foxes were the only animals that I have ever known that could be brought to a person's side by tossing stones in their direction, each stone being dropped a little closer than the previous one.

Their sense of smell was developed to a high degree. Places where waste water had been dumped at noon retained an interest for them after nightfall although the hot desert sun had no doubt done a thorough job of evaporation.

While in this San Felipe region we collected about a dozen live sidewinders and one red racer. These were all kept in individual cloth bags and for shade were stored under the cots. Tracks told us each morning that the foxes circled these bags as we slept but we did not discover the red racer was missing, sack and all, until we were ready to leave. Then we checked over

The little desert fox has many names: desert kit fox, desert swift, long-eared fox, big-eared fox. The Mexicans call it Zorra. It is seen so seldom by daylight that not until 1888 did C. H. Merriam introduce it to science under the name *Vulpes macrotis*, with type locality at Riverside, California.

Outstanding peculiarity, as Latin name would indicate, is its big ears. Color is soft buffy yellow, head and mantle peppered with grey, tip of tail dark brown, chin, throat and belly pure white. Length 30-33 inches, weight 4-6 pounds.

Its voice, often heard in the quiet night, sounds like the screech of an owl. Den usually is in open desert on level ground or in a little mound. Opening to the small burrow goes down at a sharp angle 8-10 feet.

our captives. The only non-poisonous snake in the group was gone. Although the actual taking of the sack was not seen by any member of the party we all felt sure that the foxes were the culprits. Consider the difficulties the removal of this snake entailed. Completely covered, it was one of ten or eleven of equal weight, and must have reeked strongly with the odor of the sidewinders piled around it. The foxes'

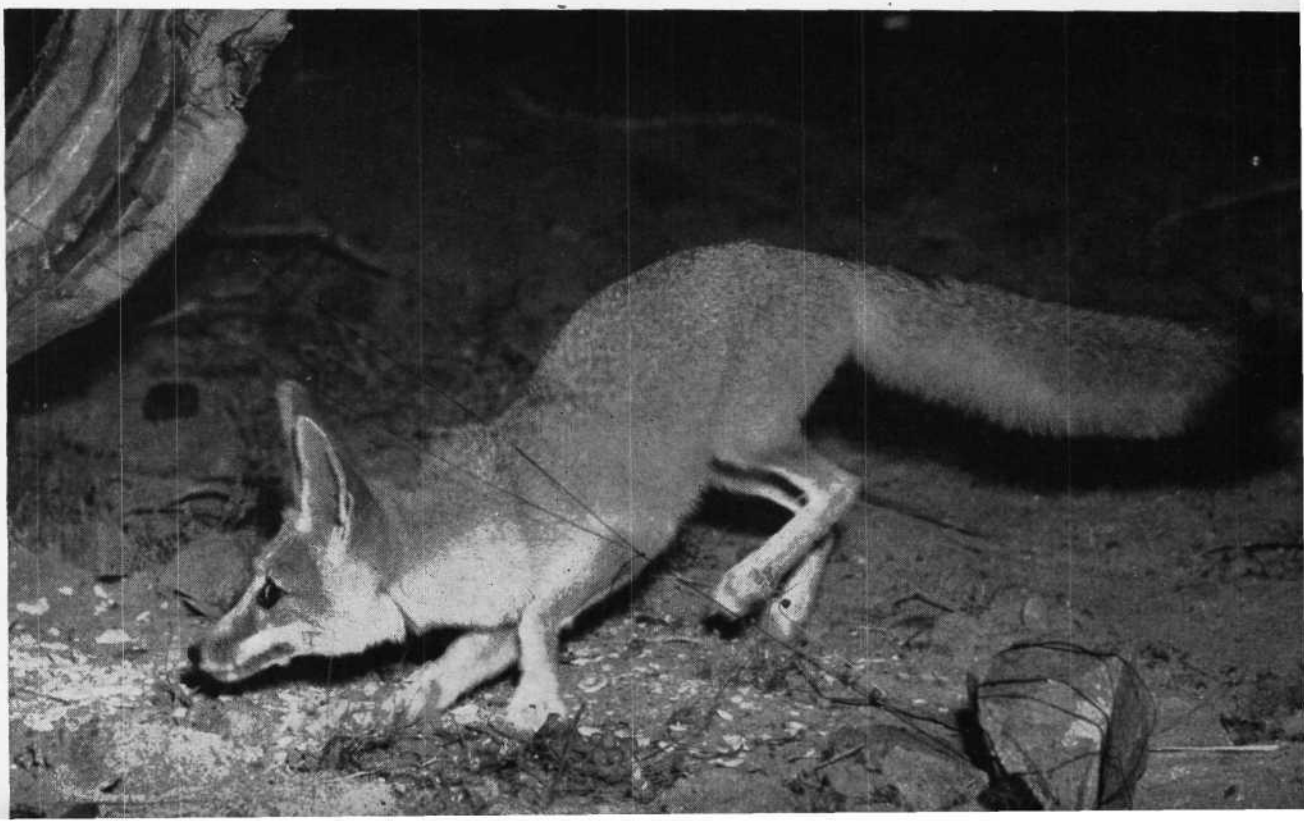
sense of smell, however, evidently discerned something edible in this venomous mass, and on the desert where food is scarce they couldn't afford to miss a bet even though it meant very close approach to reptiles whose bite was deadly to them.

On one side of the camp we set up an automatic camera using bacon grease in a buried jar as bait, and then from our cots we watched. In the first few pictures the foxes just blundered into the threads which tripped the flash mechanism, and then practically turned somersaults in their endeavor to leave when the bulb went off. Then they became crafty and tried crawling under the threads to reach the alluring smell. When this failed they tried stepping over them, gingerly lifting each foot high in the air. After many fruitless maneuvers they became bold, and perhaps realizing that the flash was harmless, pushed to the bait and held their ground despite the glare of the man-made lightning.

The jar holding the bacon grease was itself a booby trap. It was long and narrow and much too deep for the tongue of a fox. For several hours they did their best to reach the liquid within and then decided to take the jar. Grabbing it by the edge they pulled and tugged and on each attempt lifted it ever so little. It finally came loose and was carried away by its proud possessor with all the care in the world. His every gentle step showed that he realized he was carrying a spillable treasure. Somewhere off in the dunes this jar may still be baffling foxes, and it, like the kangaroo rat burrows, probably has a well worn trail to its entrance.

o the flash, and is
t bacon grease.

*He's learned those threads have something to do with the man-made lightning,
and tries to crawl under them.*



LETTERS...

Petrified Tree Stumps . . .

Belgrade, Montana

Dear Desert:

In your November issue, Toney Richardson in his "Where Tree Stumps Turned to Stone" states that as far as is known these are the only standing stumps of petrified wood.

It may interest Desert readers to know there are other standing stumps, and many of them. I refer to the region north of the northwest corner of Yellowstone national park.

Beginning on Specimen ridge, just inside the former north boundary are a number of standing stumps and they continue north to Porcupine creek, a distance of about 20 miles, along Gallatin range. The Gallatin range is volcanic, partly burned red conglomerate, partly clay that looks like grey concrete, and other parts of dark lava strata. Leaf fossils are also found.

The largest stump is located on the summit of Gallatin range at the head of Daly creek. This stump, according to U. S. rangers' measurements, is 19½ feet in diameter and about eight or ten feet high. Picture of it is enclosed.

There is also another stump area in Yellowstone park on the Lamar river between Mammoth Hot springs and Cooke City. It also is reported there is a stump or two in the Red Rock canyon area of Southern California.

C. A. KINSEY

Fruit of the Devilsclaw . . .

Los Angeles, California

Mr. Editor:

Not being familiar with the policy of Desert Magazine as to just anyone butting in, if I clutter up your time too much just slam the door in my face. I give you my word of honor I will not be peevish.

In Desert's February issue, page 29, Jerry Lauder milk sketches a branch of the Martynia plant, *M. parviflora*—to me just plain devilsclaw. He does well with the leaf and stem, yes and the fruit. But please tell Jerry that the fruit does not grow out of the stalk as he shows, but on a distinct fruit stem like a bunch of grapes.

I know. I grow them in my back yard. I have seen as many as 14 fruits in one cluster. This year I harvested 340 fruits from 10 bushes. The fruit grows in a pod similar to the pea, and green in color. When ripe, the pod bursts open and falls off, leaving the black inner pod containing the seeds still clinging firmly to the cluster stem. The tail then splits as you see on page 27. Jerry has covered the balance nicely in his article.

THOMAS P. TOWER



Petrified stump—on Gallatin range.

Photo courtesy C. A. Kinsey.

Famous for Its Willow Trees . . .

Vallecitos Stage Station, California

Randall Henderson:

I do not know whether my pronunciation or your hearing was bad that day several years ago when you asked me the name of the canyon at Egg mountain. Anyway, you published it in Desert Magazine as Bow Willow canyon. Actually, it has long been known among the old-timers as Bull Willow canyon.

Some of us out here decided this mistake should be corrected before it is too late, and we knew you would want to help us preserve the old name.

BOB CRAWFORD

You are right, Bob. Desert prefers the names used by the old-timers, and thanks for the correction. Henceforth it will be Bull Willow—famous for its desert willows and native palm trees.—R.H.

Mystery of the Baby Face . . .

South Pasadena, California

Gentlemen:

Would like to ask if there is such a thing as a very poisonous desert resident called "Baby of the Desert," so named because of the resemblance of its face to that of a human baby. Whether this so-called "Baby of the Desert" is supposed to be insect, reptile or rodent, I could not find out. I was told about it recently by a woman who was living near Phoenix several years ago, where she heard about it, but she admitted she had never seen one. I asked her if she was talking about the Gila Monster and she said no, that it was considerably smaller than the Gila Monster. For my part, I have never heard of such a desert inhabitant and would like to know if there is such a thing.

WILLIAM M. WELDON

Friend Weldon: The question of the Baby of the Desert, Baby-face, or Niño de la Tierra, as it is variously called, came up for discussion on the Letters page of the magazine two years ago. A reader sent in a description of the fearsome beast as it had been pictured to him and asked for confirmation from someone who had seen it. It was said to be a doll-like animal, about three or four inches in length, walking on all fours, with head and face like that of an infant. It was claimed to be more poisonous than a rattlesnake, but harmless unless molested.

None of our readers would admit personal knowledge of such a creature. In fact, it appears that the Baby-face is actually our old friend the yellow and black striped Jerusalem-cricket or Sand-cricket, who is nocturnal and usually found under boards or stones. April, 1944, Nature Magazine has an article and photographs regarding him.—R.H.

We Need Help on This One . . .

Helper, Utah

Dear Sir:

I wish to know if you can obtain for me a copy of the poem *Southwest from Bullfrog*? This poem was published in the Pacific Monthly in August, either 1910 or 1912, probably the latter.

FORREST BENEDICT

Can any of Desert's readers help us find a copy of this poem?—R.H.

We Don't Know This Answer . . .

Elko, Nevada

Dear Desert:

Will you please send me more definite information regarding the location of the Pegleg mine. I believe I can find that old mine if you will give me the approximate locality.

ED. HASKELL



FACT AND FICTION FROM FABULOUS DEATH VALLEY

Only a bold reporter would undertake to encompass the fact and mythology of America's most incredible desert region in a single volume. And yet that is the assignment George Palmer Putnam chose for himself when he began gathering material for his new volume, *DEATH VALLEY AND ITS COUNTRY*.

Death Valley is all things to all men. The artist, the botanist, the geologist, the historian, the prospector, the engineer, the tourist—they all have come to this fabulous region and found that it held some special interest for them.

George Putnam's approach was that of the reporter. He delved into every phase of the Death Valley country—its geology, its plant and animal life, its mining and tourist industries, and its people—past and present. Like every good reporter, he knew that above all else, human beings are interested in their own species. And so his book is sprinkled generously with the tales and tall tales, the lore of men and women from the prehistoric aborigines who incised strange symbols on the canyon walls down through that fantastic era of prospector and mining camp to the present day when tourists crowd the good roads and hostleries throughout the winter season.

The author has spent much time in Death Valley in recent years, and much of the material in his book came from first-hand sources—from the men and women who live there and who know most about the country. The volume is dedicated to T. R. Goodwin, superintendent of Death Valley national monument. It was from Goodwin, former Park Naturalist W. B. McDougall, from Walter Scott of Scotty's castle, Indian George and Hungry Bill, Owen Montgomery of Stovepipe wells, Anne and George Pipkin of Trona—from these and many more, the author gained his information.

Told in detail, the story of Death Valley, past and present, would fill a great library. The author with rare discrimination, has selected the highlights of this voluminous data, and presented it in a simple and very readable style.

The appendix includes a bibliography, suggestions for summer travel, and a descriptive and mileage log of some of the interesting sidetrips to be made in the national monument.

Published by Duell, Sloan and Pearce, New York, 1946. 220 pp. Index. \$2.75.

GUIDEBOOK TO HIGHWAY 66 PUBLISHED FOR TRAVELERS

In *A GUIDE BOOK TO HIGHWAY 66*, Jack D. Rittenhouse has compiled a handbook which, if kept accurate and up-to-date, will be invaluable to the tourist using our most-publicized cross-continental highway. Even those familiar with the route will find much new information. The availability, or non-availability of gas, repairs, groceries and tourist accommodations is listed for every spot on the map. In addition, historical, geographical and botanical information is scattered through the work, including location and text of historical markers.

Mr. Rittenhouse offers information regarding equipment to take along, pronunciation of Spanish names, driving tricks, manufacture of Navajo blankets, and a variety of other subjects. As for example, at Meteor City, Arizona: "For many years a roadside sign said 'Population 1' but early in 1946 the operator married and the sign now says 'Population 2.'" The booklet is well written and seems to contain very few errors.

Jack D. Rittenhouse, Los Angeles, Calif., 1946. 128 pp., paper covers. \$1.

HANDBOOK OF LIZARDS VALUABLE FOR AMATEURS

For many years, the amateur interested in desert lizards has found it necessary to cull information about various species from magazines, pamphlets and volumes which are both outdated and hard to obtain. There was a real need for a book such as the newly published *HANDBOOK OF LIZARDS* by Hobart M. Smith, and its appearance will be greeted with enthusiasm by anyone desiring a closer acquaintance with the little reptiles of tree, sand and rock.

The book, sixth in the American Natural History series edited by Albert Hazen Wright, gives full treatment to the 136 species of lizards thus far known in the United States and Canada. More than half of these lizards are found in the desert country. Each species is treated under headings of range, size, color, type locality, scalation, recognition characters, habitat, habits, and life history when known. Under the heading of habits, it is possible to discover such items as the method the chuckawalla uses to inflate himself.

The book was intended for amateur and

casual student as well as professional. Simple visual means of identification are included wherever possible in the intricate keys, in addition to scale types. Hundreds of photographs and line drawings help determine identity.

The 60 page introduction gives a summary of the lizard family and indicates where more complete information can be found. Such details as physical structure, food, temperature regulation, color pattern, folklore, economic importance and methods of collection and preservation are discussed. We learn that the tongue is used for "smelling," that some lizards see through permanently closed eyelids, and that most lizards become dark at low temperatures and light at high temperatures. The style is unusually interesting and readable for a book of this type.

Comstock Publishing Co., Ithaca, N. Y., 1946. 557 pp., 270 illustrations, 41 distribution maps, bibliography, index. \$5.75.

BOOK BRIEFS . . .

Byron Cummings, dean of Southwestern archeologists, retired in October as custodian of Kinishba Museum, near Fort Apache, Arizona. It was this prehistoric ruin which he excavated and restored, mainly with the aid of Apache Indians, about which he wrote in the book *Kinishba*. Dr. Cummings has made innumerable contributions to the archeology of the Southwest; he established the state museum at University of Utah and later developed the state museum of Arizona. Author of many newspaper and magazine articles, his latest writing, a manuscript on Southwestern archeology covering his work during the past 40 years, is now in the hands of a publisher.

University of Arizona, Tucson, has just issued another bulletin, No. 11, written by Arizona historian Frank C. Lockwood. *Thumbnail Sketches of Famous Arizona Desert Riders* includes brief biographical chapters on 25 noted Arizona figures, drawn from the Spanish, Mexican and early American periods. Some of the best known names are: Fray Marcos de Niza, Coronado, Padre Kino, De Anza, James Ohio Pattie, Edw. Fitzgerald Beale, Joseph C. Ives, J. Ross Browne, Will C. Barnes, Joseph A. Munk, Godfrey Sykes. 35 cents.

Another in the long list of Nelson C. Nye's westerns, published in 1946 by Macmillan Company, is *Blood of Kings*. It's the "story of a dude-wrangling little saddle tramp who has big dreams in his head and horses in his heart."

THE COURAGE OF JOSHUA

Illustrated Desert Poems

By CONSTANCE WALKER

2814 W. Ave. 30

Los Angeles 41, Calif.

A California Gift . . . \$1.00 a copy

Mines and Mining . .

Trona, California . . .

Panamint City is being revived, with expenditures of \$1,500,000 planned to put the historic district back in the big producer class. N. James Elliott, president and general manager of American Silver corporation, has announced an \$80,000 road project and construction of camp facilities for 85 men already under way. Future developments include 300-ton mill and driving of cross-cut tunnels into known ore bodies. Ore shipped from the camp during 1873-1900 boom is said to have assayed \$400-\$4000 a ton.

Independence, California . . .

Fire, believed to have started from a defective water heater, destroyed surface properties of Tungstar mine on Mt. Tom, doing an estimated \$250,000 damage. Bunkhouses, commissary, hoist house and aerial tram terminal were burned as stiff winds fanned the flames. Loss was covered by insurance, according to Peter N. Stevens, general manager. The Tungstar, big wartime producer of tungsten, was being readied for production after a midsummer cloudburst which wrecked mining property and dwellings in Pine Creek canyon.

Boron, California . . .

Erection of a new borate products factory at Boron, to cost \$225,046, has been approved by the Civilian Production administration. Pacific Coast Borax company, builders of the plant, contended that it was essential for production of such items as bath tubs and enamelware.

Farmington, New Mexico . . .

Southern Union Production company has brought in a 30,000,000 foot gas well in Barker dome area of San Juan basin. Well came in at 9300 foot level. There are now 16 producing wells in Barker dome, which lies 15 miles northwest of Farmington, four of them in deep strata.

Indio, California . . .

Work has started on a railroad to connect Eagle Mountain mine, near Briest camp, to Southern Pacific lines. Road will facilitate shipment of iron ore to the Kaiser mills at Fontana. Construction will require two years, according to Ray Fullerton, project manager for Kaiser company. Preliminary surveys will be finished within four months.

Trona, California . . .

Carbonation plant, to be erected by American Potash and Chemical corporation at a cost of \$4,500,000, is expected to increase yearly production of soda ash 60,000 tons, and borax, 30,000 tons. New company-developed process will treat secondary Seales lake brine and will substantially increase the company's raw material reserves. Construction will start early in 1947. Also planned are a \$2,000,000 power plant expansion and research and engineering facility to cost \$300,000.

Battle Mountain, Nevada . . .

Large scale placer operations will start in Rabbit Hole section of Rosebud placer district, northern Pershing county, with completion of a 6000 cubic-yard dragline dredge and gravel washing plant. Ground has been leased from Reno owners by U. L. Poston of the Poston Picher corporation. A mobile test plant, handling from 240 to 400 cubic yards per day has been used for testing purposes during the past eight months.

Lovelock, Nevada . . .

First postwar shipment of gold bullion from mine of Standard Cyaniding company was made by President H. L. Hazen, early in November. The open-cut mine and cyanide mill, one of Nevada's foremost gold producers before the war, is located at the west base of Humboldt range in central Pershing county. New equipment was installed to replace that released to wartime producers of strategic minerals.

Fallon, Nevada . . .

Eldorado Lost Spanish mine, located 34 miles east of Fallon, has been optioned to Philadelphia Mines and Metals company. Option was for \$20,000 for 18 months and new operators plan installation of a small ball mill. Mine was worked in the sixties by Spaniards, who shipped high grade to Sacramento mint. Present values run \$10 a ton over six-foot width.

Lone Pine, California . . .

Construction started November 21 on Permanente Metals corporation's soda ash plant near Cartago at Owens lake. Plant will be completed within four months, and will employ 35 men. Ted Newell is office manager of the new unit, part of the Kaiser industrial network. Entire output will be utilized by other Kaiser enterprises. Soda ash has many industrial uses and is a basic ingredient in the manufacture of soap and glass.

Revival of the old silver camp at Calico, northeast of Barstow, may result from a diamond drilling program being undertaken by Zenda Gold mining company, owner of large holdings there. Increased price of silver has led to search for medium grade ore suitable for steam shovel mining.

Roscoe (Curley) Wright has been elected president of the Goldfield chapter, Western Mining council. Martin Duffy is new vice-president and Robert A. Crandall, publisher of Goldfield News, is secretary-treasurer.

Arthur T. Crandall, prominent Utah geologist, died on November 12, in Salt Lake City. Crandall had been employed by the International Smelting company at Tooele for 30 years.

John H. Leyshon, active in Utah and Nevada mining circles for 60 years, died on November 17, in Salt Lake City. As a boy he worked in mines of Beaver and Milford. He started leasing operations in Tintic in 1890, and since that time has taken part in development of Eureka, Mammoth and Silver City, Utah, and Goldfield, Rhyolite and Las Vegas, Nevada.

248,569 ACRES . . .

This is the Total 1946 Fall Crop Acreage under cultivation in the area served by the Imperial Irrigation District in Imperial County.

(Compilations made by the District)

Included in this Record-Breaking Total are the following:

FIELD CROPS	196,328 Acres
GARDEN CROPS	46,764 Acres
PERMANENT CROPS	5,477 Acres

Imperial Irrigation District's Water Distribution System which has over 3,000 miles of canals and drains serves the greatest Irrigated Empire in the Western Hemisphere.

Its power system with more than 1800 miles of Transmission and Distribution Lines, keeps Farms, Businesses and Industrial Enterprises running in an area larger than some states—

IMPERIAL IRRIGATION DISTRICT—PUBLICLY OWNED AND OPERATED, IS THE LIFELINE FOR ONE OF THE WORLD'S GREATEST BREAD BASKETS—PRODUCING FOOD THE YEAR AROUND FOR HUNGRY POPULATIONS.



Use Your Own Power—Make it Pay for the All American Canal

HERE AND THERE... on the Desert

ARIZONA

Maynard Dixon Dies . . .

TUCSON—Maynard Dixon, one of the best known painters of the American West, died at Tucson on November 14. Born in Fresno, California, he spent his childhood in the San Joaquin valley. When 16, he sent his sketchbook to Frederic Remington, who encouraged him in his art work. He began his career as newspaper and magazine illustrator in New York. The money he earned was spent on trips to Mexico, New Mexico, Nevada, Utah, Arizona and other western states. Most of his early work was destroyed in the San Francisco fire of 1906. Since 1920 he has become famous for his paintings portraying the beauty and grandeur of desert, mountain and canyon. Among his best known works are "The Earth Keeper," "Wise Men" and "Destination Unknown."

Hunter Bags Black Bear . . .

WILLIAMS—For 35 years, H. F. Sutherland hunted in Arizona without sighting a bear. He finally came upon one, in Wild Horse canyon, while hunting deer and armed only with a 30-30. Sutherland had to travel fast to keep the bear from cutting him off from camp. The bear took the trail down the canyon, and the hunter started shooting. The animal, finally stopped by eight shots, had to be removed from the canyon with block and tackle. After a layer of fat from two to four inches thick and estimated to weigh 100 pounds was removed, the animal still scaled 338 pounds.

Cut-Off Road Completed . . .

HOLBROOK—Motorists in eastern Arizona desiring to cut across from Highway 60 to 66, or vice versa, will find the new road between Holbrook and Showlow surfaced and in fine condition. Started in January, 1946, the road was completed October 19 at a cost of \$475,000.

Flyers Drop In on Desert . . .

YUMA—When a B-25, on the last leg of a cross country flight, developed engine trouble 50 miles northeast of Yuma, the pilot, Lt. Col. Joseph Brannock, ordered ten crew members to jump. Col. Brannock was uninjured in a crash-landing near Holtville, California. During the next 24 hours, crew members who had parachuted were located scattered over 100 miles of desert. Four were found near Castle Dome mine, another north of Wellton, and four made their way into Blythe, California. Last member was located and picked up by plane east of Castle Dome, where he had spread out his parachute as a marker. Only two flyers suffered injuries, one badly injuring an ankle, the other breaking an arm. Fog prevented the plane from making a designated stop at Phoenix. It was based on Muroc field.

Squirrels Too Thrifty . . .

SAN CARLOS—When Mr. and Mrs. Brack Lindley reported that a thief had cut a hole in a box and stolen their savings, Postmaster C. H. Higgins investigated. He dug up culprit and loot, finding a squirrel nesting in \$500 worth of shredded \$5 and \$10 bills.

Buried in Boothill . . .

TOMBSTONE—E. C. Nunnally, guardian and restorer of Boothill graveyard, was buried in the historic cemetery November 11. His was the third burial in Boothill in recent times. Quong Kee, Tombstone's last Chinaman was buried there in 1938, and John Slaughter, Cochise county pioneer, during the war. Nunnally, widely known mine operator and contractor, returned to Tombstone in 1945, and became interested in the town's history. His restoration and protection of Boothill graveyard won commendation from the Arizona Historical society.



MUY BUENO! Imported Wool. MEXICAN SWAGGER JACKET

Exquisitely embroidered jackets from Old Mexico, assure alluring appeal for sports, campus, class, or office wear. Never two embroidery designs alike. Fronts also embroidered and two ample patch pockets. Retail \$27.50 and up. Sizes 10 through 18. Variety color choices: white, red, blue, green, yellow. Give dress size, height, and second color choice. Order by mail, enclosing \$19.47 Check or Money Order "Mother and Daughter Alike" Jackets \$29.47.

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Beautiful 35mm 2x2 color desert slides of Colorado Desert Area: Palm Springs, Seven Palms, Coachella-Indio Palms, Borrego Desert in breath-taking verberna bloom, and restful, peaceful California Painted Desert. Six gorgeous slides \$2.50—with Professional Viewer \$5.00.

Also new series of ORIGINALS of Mohave Desert Joshua with thrilling storm clouds—five shots of desolate Death Valley: Dantes View, Furnace Creek, Zabriskie Point and Amargosa Desert with Funeral Mountains. Six slides \$2.50.

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A triumphant new season under the winter sun at Palm Springs! America's pioneer desert resort welcomes a distinguished colony to its 35-acre estate... secluded bungalows, all sports. Season October to June.

38th season under original ownership and management of Nellie N. Coffman, Earl Coffman and George Roberson

PALM SPRINGS, CALIF.

THE DESERT TRADING POST

Classified advertising in this section costs 7 cents a word, \$1.00 minimum per issue

INDIAN GOODS

WE ARE AGAIN RECEIVING real hand-hammered Indian jewelry from the reservation all made by top silversmiths. For our rock customers we have bought another collection of rock, making this one of the largest collections of rocks and minerals in this part of the country. Our collection of rugs, baskets and jewelry is still large despite the shortage. Come in and see us. Daniels Indian Trading Post, 401 W. Foothill Blvd., Fontana, Calif.

INDIAN ARTIFACTS. Arrows, Spears. No Catalog. Write Herbert Lewis, Builder of fine Indian collections, Box 4, Strafford, Mo.

NAVAJO RUGS—Just returned from my old home at GANADO and ORAIBI, Arizona, with beautiful assortment rugs from 13½x 16½ feet, 12x7, 11x8 feet. **COCHITI HANDMADE INDIAN DRUMS, KAT-CHINA DOLLS**, fine NAVAJO Indian Handmade INDIAN TURQUOISE SET JEWELRY, OPEN SUNDAYS. **HUBBELLS INDIAN TRADING POST** (Tom S. Hubbell), 2331 Pico, Santa Monica, Calif.

INDIAN RELICS: 4 very fine ancient Indian arrowheads \$1.00. 4 very fine bird arrowheads \$1.00. 10 nice perfect arrowheads \$1.00. Stone tomahawk \$1.00. 2 flint skinning knives \$1.00. 10 arrowheads from 10 different states \$1.00. 10 arrowheads of 10 different materials \$1.00. 2 nice spearheads \$1.00. 4 small spearheads \$1.00. 5 stone net sinkers \$1.00. 5 stone line sinkers \$1.00. 2 fine flint chisels \$1.00. 4 finely made duck bill scrapers \$1.00. 10 stemmed scrapers \$1.00. 5 rare round hide scrapers \$1.00. 5 small finely made knife blades \$1.00. 2 stemmed hoes \$1.00. 4 fine drills \$1.00. 5 fine awls \$1.00. Rare ceremonial flint \$1.00. 4 sawedged arrowheads \$1.00. 4 odd shaped arrowheads \$1.00. 4 fine drill pointed arrowheads \$1.00. All of the above 23 offers for \$20.00. Fine Stone Celts or ungrooved Axes, 50c, 75c, \$1.00, \$1.50, \$2.00 each according to size. 100 assorted Sea Shells \$10.00. Location given. 20 slightly damaged arrowheads of good grade \$1.00. 100 damaged arrowheads \$3.00. List free. Lear's, Box 569, Galveston, Texas.

MISCELLANEOUS

INCOME TAX returns prepared by expert with 33 years experience, minimum fees \$1, single; \$2, joint return. Beginning March 1st, fees \$3 and \$5, respectively. John Wesley Davis, 1611½ Donaldson St., Los Angeles 26, California.

FOR SALE: Lapidary outfit consisting of 10 inch diamond saw, 8"x1" mounted grinding wheels, 100 & 220 grit. 12" Covington horizontal lap, 8"x2" sander, hardfelt buff. All mounted on heavy 6 ft. table with jack shaft in rear with pulley and belts to run from one motor. All bought in last three months. Must sell on account of health. Little, Palmer Canyon, Claremont, Calif.

DESOLATE DEATH VALLEY in gorgeous color. See advertisement page 25. Desert Color Slides.

ELDERLY GENTLEMAN, metaphysician, should like to find out-of-door work in Arizona or Southern California. Artistic, versatile, reliable and clean. Address "Desert Lover," Desert Magazine, El Centro, Calif.

HAND WROUGHT COPPER, in all types of metal arts for the home. Many desert gems cut and polished or rough. Inlays for the fireplace and barbecue. Send for a list of our special items. Valley Crafts Shop, 14135 Oxford St., Van Nuys, Calif.

CACTI AND SUCCULENTS—From the deserts of the world. Don-Rita brand. By appointment only. Write us your needs and we will try to help you. Michael Donnelly Cacti Gardens, 334 Lowell St., Daly City, Calif.

BINOCULARS—Cleaned, repaired and collimated, all makes by Factory Trained man. Fast Service. Write, tell me your trouble for estimate. **THE GUNSHOP**—12 W. Roosevelt St., Phoenix, Ariz.

WHAT DOES Your Handwriting Indicate? Send one dollar with short letter for typewritten analysis. Pinkham, Plaza Hotel, Riverside, California.

COMMERCIAL LAPPING and Polishing on flat surfaces. Finishing of bookends and polished rocks for fireplaces a specialty. Send for estimate. Joseph R. Mathieu, 1230½ Boyle Ave., Rt. 1, Box 841, Fontana, Calif.

FOSSILS—Geological supplies, Geiger counters, thin sections, picks, hammers, etc. Omaha Scientific Supply Co., Box 1750, Omaha 4, Nebraska.

PANNING GOLD—A side line hobby for Rockhounds and Desert Nomads. You should know how to pan gold, recognize gold bearing gravel and valuable quartz ledges. The places you go are where rich virgin ground is found. Send your name for new folder on panning gold, with pictures—list of mining books and equipment for prospector beginners. Old Prospector, Box 21A5, Dutch Flat, Calif.

BOOKS — MAGAZINES

GHOST TOWN NEWS wanted, first six issues, et. al.; old Bibles, scarce books, unusual items, sell by mail. Davis, 1611½ Donaldson St., LA 26, California.

WILDCRAFTERS MAGAZINE—Woodcraft and Outdoor Living Lore. 5 years only \$4.00. 1 year \$1.00. 35c copy. Spring issue free when subscribing. Reasonable advertising rates. Wildcrafters World, Rt. 1-D, Alton Sta., Ky.

COMPLETE DESERT MAGAZINE file. Vols. 1 to 9 (Nov. '37 to Oct. '46). Good condition. Five in looseleaf binders. \$50.00 f.o.b. Covington. H. S. Keithley, 81 Elm St., Covington, Tennessee.

WANTED: Photos and negatives of old diamond shaped Auto Club markers. Will pay \$1.00 each for any taken on the Colorado and Mojave deserts, especially Langford Wells. Not too badly mutilated. Photograph at 6 ft. Harmon Austin, 19 Emerson St., East Weymouth 39, Mass.

CAMP AND TRAIL INCIDENTS OF PIONEER LIFE, by W. Irvn Lively. A desert book by a desert author, who has lived for fifty years in the Southwest. It has the real tang of the Desert. If you like poetry, you will like it; if you do not like poetry you will read it and forget that it is poetry as you become absorbed in its narrative and descriptive thrills. \$1.50 postpaid. Address W. I. Lively, Route 6, Box 1111, Phoenix, Ariz.

CALIFORNIA

Decoys Decoy . . .

INDEPENDENCE—Why not locate ducks from the air? Andri W. Reichel of Inyokern knows one reason. Reichel had himself flown from Bishop over Owens river area and sighted a dozen fat mallards on a little pond, with no hunters visible in the area. Reichel landed and reached the pond in short order. About to open fire on the still-sitting ducks, he was warned by their owner, hidden in the bushes, "Take it easy, hunter, those decoys aren't very good eating."

International Airport Sought . . .

CALEXICO—An airport west of Calexico, with half of its facilities in the United States and half in Mexico may become a reality if plans of border civic and business leaders are carried out. Col. Cipriana Villaneuva Garza, chief of the Mexican immigration service at Mexicali took the matter up with President-elect Miguel Aleman on a recent visit to Mexico City. Such an airport would permit planes to land on either side, be rapidly inspected, and taxi over the line for inspection on the other side. Much red tape would be eliminated. Site of present Calexico airport would be used and adjacent land in Mexico would be utilized. Plans for a second entry gate between Calexico and Mexicali were also discussed. Congestion would be relieved by using the new gate for motorized equipment, while the old one would be used for foot traffic.

DEALER & COLLECTOR; World-wide Firearms publication. \$1.00 yearly; Foreign \$2.00. Dealer & Collector, 71HR, Flushing, New York.

LIVESTOCK

LYNX, year old raised from kitten; tame and gentle, beautifully colored; weight about 35 lbs. Would be great addition to any roadside business. Guarantee delivery. \$150.00. Grail Fuller Ranch, Daggett, Calif.

KARAKULS. Producers of Persian Lamb fur are easy to raise and adapted to the desert which is their native home. For further information write Addis Kelley, 4637 E. 52 place, Maywood, California.

REAL ESTATE

FOR SALE—300 acres, undeveloped, near All-American Canal, straddles Highway 111, at Frink, slightly northwest of Niland, Imperial County, Calif. \$25.00 per acre. Terms. P.J.B., 210 So. Flower Street, Los Angeles 12, Calif.

FOR SALE or lease on terms—4 gold claims in River Rouge, 320 ft. tunnel, shaft 60 ft. with 2 drills 125 ft. each. Good road to mine, water to run small mill. Mrs. J. H. Drake, Box 866, Kingman, Ariz.

FOR SALE: 3 room house, 10 to 40 acres in Lower Borrego Valley. Highway 78. Two miles west of Ocotillo. Magill.

LAST CHANCE CANYON. There's too much business here for my wife and me to handle, so we are offering our lapidary and rock shop with 20 acres for sale. Includes good stock of banded jasper, petrified wood and other material. The canyon is open again, and some good fire opal and wood are being picked up. Address F. W. Clark, Saltdale, California.

For Imperial Valley Farms—

W. E. HANCOCK

"The Farm Land Man"

Since 1914

EL CENTRO — — — CALIFORNIA

Records Broken at Salton . . .

INDIO—Six new world speed records were set at the annual Salton Sea regatta in November. Only ten racers of the 184 who started, survived three days of speed trials. Fastest time was made by Tommy Hill, in 135 cubic inch hydroplane class, who reached 84.008 m.p.h. The regatta was held a week later than scheduled, due to rough water on original date. Photographer Dale Phillips, of Indio, was unable to picture most exciting news event of the regatta, since he was chief participant. Phillips flying a new light plane, was approximately 500 feet above the Salton sea when the motor died. Phillips headed toward shore and hit the water at about 30 miles per hour. He was uninjured, and climbed out of plane as the crashboat arrived. Plane was in the water for some time, and is believed to be a total loss, along with expensive photographic equipment.

Mountain Road Near Completion . . .

BANNING—Under construction for several years, the Banning-Idyllwild road will reportedly be ready for paving during 1947. Riverside supervisors will petition federal government to include highway in forest service system.

Fire in Olancho . . .

INDEPENDENCE—Fire has destroyed post-office, store, garage, service station and a residence in Olancho. Resident and tourist volunteer fire fighters used garden hoses, buckets, shovels and snow balls in efforts to keep the fire from spreading.

That Old Sea Serpent Again . . .

COACHELLA—The Desert Barnacle reported reappearance of Salton sea's much-advertised sea monster. George Ames of Indio, Bill Alexander of Mecca and Roy Harmon of Thermal viewed the creature at a point two miles west of Desert beach, 10 miles below Mecca. It was on the surface, basking in the sunlight. Several birds were on its back, pecking at marine life. It was suggested that the serpent probably hibernated at the bottom of the sea during hot months. It made its reappearance just before the annual Salton sea regatta, and the Barnacle warned that it must not be permitted to enter the speed contests.

Quail Survey Scheduled . . .

INDEPENDENCE—Quail hunters were asked to cooperate with California division of fish and game, bureau of game conservation, who are making a statewide food-habits survey of native mountain quail ranges. Hunters were asked to turn in crops and gizzards of the birds they shot, to local collection stations, along with specified information. Food-habits survey is part of a research program designed to improve the status of mountain quail.

Manzanar Being Dismantled . . .

LONE PINE—Manzanar, relocation center for some of the more recalcitrant Japanese during the war, is vanishing piecemeal under attacks of home-hungry veterans. WAA put 320 buildings, 37 warehouses and approximately 1,000,000 board feet of used lumber on sale. Veterans and priority holders snapped up nearly half entire inventory the first day. Barracks and mess halls went for homes, ranch buildings, barns and airport facilities. They were priced from \$50 to \$500, and sold "as is—where is."

Time was when travelers went out of the way to avoid Death Valley, but some 77,000 tourists went out of their way to look at it last year, according to the National park service.

One-Telephone Town . . .

BARSTOW—Borax town of Boron is unhappy about its telephone facilities. There are approximately 1000 inhabitants in the community and one telephone. Barstow Printer-Review attempted to obtain returns from the town after last general election, and finally gave up, deciding that mail service would be more rapid.

Douglas C. Rhodes, who directed erection and maintenance of more than 750,000 road markings in Southern California, died at his home in Arcadia on November 17. Mr. Rhodes, for 30 years field engineer of the Automobile Club of Southern California, was instrumental in setting up guides to good water holes throughout the Mojave desert, and was responsible for first markings on the national old trail, highway 66, the Lincoln highway, and the Bankhead highway.

NEVADA

BMI Transferred to WAA . . .

LAS VEGAS—Development of huge Basic Magnesium plant has been transferred to War Assets administration. It was controlled by Reconstruction Finance corporation. WAA will continue the policy of attempting to attract major companies to use the huge plant, but only permanent developments are sought. At present, three chemical concerns are producing chlorine hydrochloric acid and its derivatives. U. S. Vanadium company is using a chemical process to refine vanadium ore from Winnemucca, Nevada, and Bishop, California. A gemcutting concern is also using plant facilities to cut stones, and teach veterans to be silversmiths and gem cutters.

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Army Holds On . . .

RENO—War department has filed suit in federal court to retain for another five years 3,285,551 acres in Lincoln, Nye and Clark counties used for Tonopah bombing and Las Vegas aerial gunnery ranges. Filing the suit automatically continues war department's control over the huge area. Compensation payments will be negotiated with mining claim owners when the suit comes to trial. The Tonopah field has been on a standby basis since the war, while bombardier-radar training has recently been transferred from California to Las Vegas.

"LOST MINES OF THE OLD WEST"

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COUNTY MAPS . . .

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Also Oregon, Idaho and Washington County Maps.

WORLD'S MINERALS

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**29 PALMS
INN**

Carson Appeal Sold . . .

CARSON CITY—Nevada's oldest daily newspaper, the Carson City Daily Appeal, was sold during November to Arthur N. Suverkrup, president of the Record-Courier printing company of Gardnerville. Suverkrup will take over active management of the paper on January 1, 1947, from present publisher Wesley L. Davis, jr. Davis bought the Appeal in 1943 from the Mighels family, which had operated newspaper since pioneer days. There will be no change in editorial policy of the 82 year old daily.

Last Roundup . . .

WINNEMUCCA—Consigned to the Yerington packers to be used in chicken feed, 346 wild horses were shipped from Winnemucca in November. The horses were driven to Winnemucca from Fields, Andrews and Denio, Oregon by "Mustang" Smith and his five riders. Smith, who has been driving horses to Winnemucca for 40 years said, "You won't see many more bunches of any size—'bout gone from the range."

Trout Hatchery Establishes Record

RENO—Rainbow and native blackspotted trout totalling 2,608,606 were successfully raised and transplanted throughout waters of Nevada by Verdi hatchery during the past year. The large number was made possible through a new program of two periods of operation. Early spawn rainbow eggs were brought in from eastern states. As soon as they had matured, they were replaced with native blackspotted trout eggs from California and Yellowstone. Black-spotted trout spawn during June and July. A new water-cooling device was invented and installed to keep water temperatures down during summer months.

Film Studio for Nevada . . .

HENDERSON—First production of the new \$5,000,000 Allied studios is scheduled to start in February. The studios are located in a reconverted war plant at Henderson, and will produce color as well as black and white features.

TRUE OR FALSE

A very proper New Year's resolution for Desert readers is to take the quiz test every month throughout 1947—win or lose.

That is one way to become better acquainted with the botany, geology, history and lore of the Great American Desert. If you are an average tenderfoot, your score the first month will not be over 10 correct answers—but you will improve as the months go along. And you will enjoy your next desert trip more by reason of the knowledge you pick up in this test. A good desert rat will average 15 correct answers. Anything better than that is super-something or other. Answers are on page 36.

- 1—The burro is a native of the Southwest desert. True..... False.....
- 2—Squaw cabbage is the name of a vegetable cultivated by the desert Indians. True..... False.....
- 3—Utah derives its name from Indians who were living on the desert when the white man came. True..... False.....
- 4—The blossom of the creosote bush is pink. True..... False.....
- 5—Chalcedony roses belong to the quartz family of rocks. True..... False.....
- 6—Roosevelt dam was named in honor of former President Theodore Roosevelt. True..... False.....
- 7—Native Joshua trees of the Southwest are found in Nevada, Arizona and California. True..... False.....
- 8—Pumice stone is a solidified form of lava. True..... False.....
- 9—Lowell observatory is located on Telescope peak. True..... False.....
- 10—To establish a mining claim it is necessary to put a notice in all four location corners. True..... False.....
- 11—San Xavier del Bac mission is located at Tucson, Arizona. True..... False.....
- 12—When a Mexican speaks of hediondilla he is referring to common creosote bush. True..... False.....
- 13—The present Salton sea was filled by flood waters from the Colorado river in 1911. True..... False.....
- 14—The Navajo started their herds by domesticating the wild sheep they found in the mountains. True..... False.....
- 15—Horned toads belong to the lizard family. True..... False.....
- 16—The book, *The Romance of the Colorado*, was written by Dellenbaugh. True..... False.....
- 17—Pauline Weaver became famous as the "Queen of the La Paz Placer Digings." True..... False.....
- 18—Cliff dwelling Indians of the prehistoric period are believed to have been expert horsemen. True..... False.....
- 19—The capital of New Mexico is at Albuquerque. True..... False.....
- 20—Chief Winnemucca was a Paiute Indian. True..... False.....

Rapid-Shooter Missing . . .

LAS VEGAS—Attempts of a lone man to shoot the rapids of the Colorado river in a rubber boat, are believed to have ended in disaster. On October 19, Ranger Arthur Green escorted the man, tentatively identified as Charles Roemer, to Lee's ferry, where the rubber raft was launched. On October 24, the rubber boat was seen passing Bright Angel, about 75 miles down stream. No further word has been received of the man's fate, although ranger stations have been on the lookout, and planes have searched the river. Ranger Green said the boatman refused to give his name, but he saw it on a package and copied it.

NEW MEXICO

Ceremonial Gate Breaks Records . . .

GALLUP—Gate receipts at annual Inter-Tribal Indian ceremonial for 1946, reached an all-time high of \$25,248, after more than \$5000 federal admission taxes were deducted. The ceremonial, held in August, was considered successful from financial standpoint and quality of entertainment offered. Improvements are planned for the next event, including floodlights and new steel bleachers. Five retiring directors of the ceremonial association were re-elected.

Indian Service Physician Dies . . .

SANTA FE—James Franklin Lane, prominent Indian service physician, died on November 12 in the Santa Fe Indian hospital, which he founded in 1928. Dr. Lane had been with the Indian service for 19 years, was active in medical research, and was rated as one of the outstanding surgeons in the service. Until recently, his headquarters were at Dulce.

Indians Sue for Voting Right . . .

GALLUP—Attempting to force a showdown on voting rights, three Indian plaintiffs filed a civil suit in district court at Gallup, against McKinley county clerk Eva Ellen Sabin. Plaintiffs, William L. Lewis and Jesse J. Simplico of the Zuñi and Watson Gibson, Navajo, allege that the county clerk refused to accept their registrations. Grounds for rejection were that Indians who pay no taxes are not qualified to vote under New Mexico statutes. Complaint alleges that plaintiffs do pay state and federal taxes, and that non-Indian citizens are qualified to vote whether they pay taxes or not. The suit asks that voting rights of the Indians be determined, that the judgment be final regarding all other Indians and that New Mexican provision disqualifying Indians not taxed, be declared unconstitutional. Damages totaling \$900 and costs were asked.

Covered Wagon Rolls . . .

SANTA FE—When Sidney Ferrell, disabled war veteran, and his wife left Santa Fe they had already been on the road ten weeks in a covered wagon. Starting from Denver with veterans hospital at Albuquerque as final destination, the Ferrells have made as much as 25 miles on good days and as little as two miles on bad ones. Breakdowns have been frequent. The couple left Santa Fe with only 16 cents ready cash to feed themselves and their caravan. Livestock includes five horses, a colt, four burros and a cow. Most of the chickens have been eaten. Despite hardships of the road Ferrell is in better health than when he left Denver.

Horses Back in Taos . . .

TAOS—Stray horses are again roaming the streets of Taos. Owners apparently turn them loose each winter to forage for themselves, rounding them up in the spring, when needed again. Village police hired a cowpuncher to drive the horses out on the mesa, but they always return to nibble at lawns and hedges. Authorities warn that, in order to stop the practice, stock will be impounded and sold if not claimed within a reasonable time.

Fenton Dam Completed . . .

SANTA FE—State game department has announced completion of Fenton dam which impounds 30 surface acres of water on Cebolla river in Jemez mountains. Elliott Barker, state game warden, explained that the lake was designed principally for increasing waterfowl nesting and resting areas. It is being filled without appreciable clearing, so two-thirds of lake and shoreline will be heavily covered with brush and submerged trees. Remaining third will be clear for shore fishing.

Boy Scouts to Visit Ruins . . .

SANTA FE—Four-corners region of New Mexico, Colorado, Arizona and Utah will be visited next June by 17 Boy Scouts, one selected from each of New Mexico's 16 counties and one from the Navajo reservation in Arizona. The two week archeological expedition will be sponsored by Museum of New Mexico and School of American Research, and Jack Stoltz, Scout field executive, will be in charge.

Ninety miles of the New Mexico-Colorado boundary are still unsurveyed. Theodore A. Chisholm, Colorado assistant attorney general, has been asked by U. S. department of interior, to request state legislature for an appropriation to complete the survey. It was said that possibility of oil developments along the boundary would bring tax problems for both states.

UTAH

Price Up on Navajo Rugs . . .

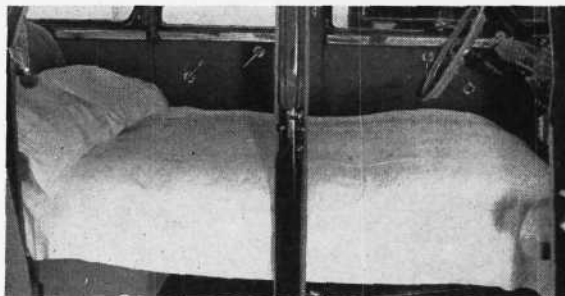
BLANDING—Hugh Jelly reports that he gets \$3.50 a pound for the rugs his wife weaves. This is 50 cents a pound over price obtained last year and with the rugs weighing nine to twelve pounds, Hugh thinks it is pretty good. Hugh's wife makes from 10 to 12 rugs each year.

Rat-Shooting Miner Destroys Cabin

MILFORD—James W. Owens shot at a rat in his Silver gulch cabin, and exploded a large quantity of dynamite. Household furnishings were scattered over the gulch, and the cabin demolished. Owens was reported in a serious condition in Milford hospital. His wife, knocked unconscious by the blast, walked eight miles to Milford for aid when she recovered.

Donner Trail Blazing Aided Mormons

SALT LAKE CITY—The Donner party, took 30 days to blaze a 36 mile trail through Emigration canyon in the Wasatch mountains. That delay brought them to the Sierra Nevadas so late that they were trapped in 20-foot snows. But the road they built may have saved the pioneer Mormons from starvation, according to Dr. W. M. Stookey, Utah historian. Dr. Stookey related the story to Stanley W. Houghton, grandson of ill-fated Capt. George Donner. Houghton came to Salt Lake City from Long Beach to obtain details of the century old tragedy.



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—DESERT MAGAZINE

Great Basin Dry Cycle Overdue . . .

SALT LAKE CITY—Utahns were warned by Salt Lake weather bureau that ten years of record-breaking rain and snowfall have not changed basic climatic conditions prevailing during the past 70 years. Weather records, dating to 1892, show the great basin subject to wet and dry cycles of apparent regularity. A dry cycle is overdue, according to the bureau. Because of greatly increased water consumption and record livestock population on the ranges, its results may be disastrous.

Pheasant Season Good— for Pheasants . . .

DELTA—High winds, cold weather and very heavy cover combined to make annual pheasant season far from the success anticipated by hunters. Hunt opened on a Saturday with a hard, bitter cold wind from the north which kept the birds close to the ground. It closed the following Monday with weather even worse. Hunters complain that smother weeds are becoming so thick that in many sections they form a barrier sportsmen and dogs cannot penetrate.

Tourist Ports-of-Entry Planned . . .

SALT LAKE CITY—Construction of eight tourist information bureaus is planned by state publicity and industrial development commission. Each structure would cost about \$21,000, and would contain spacious lounge, showers and rest rooms. It would offer the tourist motion pictures, geological information, colored pictures, maps and road information. Stations at Kanab, St. George and Wendover are scheduled for completion by May 1, 1947. Those at Brigham City, Thompsons, Echo Canyon, Vernal and U. S. 91 at Utah-Idaho line will be finished sometime during the year. Plans for the stations were protested by L. D. Sarvis, secretary-manager of the Utah State Automobile association who declared they would cost \$25,000 a year to maintain and that the original \$172,000 might better be spent in putting state highways in proper condition.

Marooned Family Rescued . . .

VERNAL—A huge bulldozer bucked 16 miles of snowdrifts in the Uintahs to rescue Mr. and Mrs. Bjorn M. Rye and their four-year-old son, marooned for three weeks at Rye's sawmill on Center creek. The family was caught by heavy snows near the end of October, and an earlier attempt to reach them failed when automobiles were unable to penetrate the drifts. Food supplies were dropped by plane on October 30. The Ryes communicated with friends in Vernal by a forestry telephone three miles from the sawmill. It took Ernest and Hugh Caldwell ten hours to push the bulldozer from Iron Springs junction to the mill. Snow was estimated at four feet deep.

Centennial Queen Selected . . .

SALT LAKE CITY—Miss Colleen Robinson, 18 year old brunette of American Fork, will be queen of Utah's great centennial celebration in 1947. Miss Robinson, representing Utah county, was selected from a field of 38 contestants. She was Days of '47 princess in 1944 and University of Utah freshman queen in 1946.

Mrs. Sylvia Eliza Sanford Metcalf, who crossed the plains at the age of four, celebrated her 101st birthday on November 16. Mrs. Metcalf remembers making soap and dyes, spinning, knitting and making clothes.

Mrs. Anna C. P. Rasmussen, who remembered Brigham Young and other early Mormon leaders, died November 6, aged 102 years. Born in Denmark in 1844, she had been a resident of Utah for 74 years. A pioneer midwife, Mrs. Rasmussen delivered more than 464 babies in early days.

Prizes to Photographers

This should be a banner year for the camera clan, with more film available—they say—and new cameras filtering into the market. Only question remaining seems to be whether or not the old jalopy can survive another season of washboard roads.

The pictures are out there waiting, and Desert wants you to bring them back, alive and sparkling, so that we can share some of the best ones with our readers. In order to make it worth your while, we again offer prizes for winners during every month in 1947. Remember that fine light and shadow effects will improve most desert pictures, and that contrast is important.

Contest subjects for every month in 1947 are listed below. Good hunting!

JANUARY—(Contest closes January 20)—Desert Roads and Trails. Old and new, made by all kinds of visitors and inhabitants.

FEBRUARY—Desert Homes. Anything, from packrat nest to cabin, actually used for living purposes by a desert inhabitant.

MARCH—Desert Recreation. Hiking, riding, rock-hunting, botanizing—the reasons we go to the desert.

APRIL—Spirit of the Desert. The picture which you feel most truly represents the fascination of the desert wilderness.

MAY—COVER CONTEST. Must be vertical 9x12's. First prize is \$15.00; 2nd prize \$10.00. \$5.00 for each acceptable picture submitted by the non-winners.

JUNE—Desert in Blossom. Either landscapes or close-ups of the wildflowers in place.

JULY—Desert Markers and Monuments. Petroglyphs and trail markers and statuary—from the beginning, men have left their memorials on the desert.

AUGUST—Desert Indians. Outdoor portraits, life and activities.

SEPTEMBER—Desert Ruins. Stations, forts, ranches and spots where history has been made and, sometimes, forgotten.

OCTOBER—Desert Clouds. Scenes keyed or dominated by some of those amazing desert cloud formations.

NOVEMBER—Desert Cliffs and Mountains. From butte to precipice, each form has a grandeur difficult to capture on film.

DECEMBER—Small Desert Life. Portraits of the little creatures of the desert, from insects to mammals.

PRIZES—With the exception of cover awards given above, the monthly prize will be \$10 for 1st place; \$5.00 for 2nd place, and \$2.00 each for non-winning photos accepted for publication.

HERE ARE THE RULES

1—Prints must be on black and white, 5x7 or larger, printed on glossy paper.

2—All entries must be in the Desert Magazine office by the 20th of the contest month.

3—Prints will be returned only when return postage is enclosed.

4—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights of prize winning pictures only.

5—Time and place of photograph are immaterial except that they must be from the desert Southwest.

6—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

7—Each photograph submitted should be fully labeled as to subject, time, place. Also as to technical data: shutter speed, hour of day, etc.

ADDRESS ALL ENTRIES TO PHOTO EDITOR, DESERT MAGAZINE.

THE *Desert* MAGAZINE
EL CENTRO, CALIFORNIA

GEMS AND MINERALS

ARTHUR L. EATON, Editor

ANNUAL BLYTHE GEM SHOW SET FOR FEBRUARY 7-8-9

Second annual show and field trip of Desert Gem and Mineral society will be held at Blythe, California, February 7, 8 and 9. Show will be staged at Blythe Woman's club building February 7 from one p. m. to midnight and February 8 from ten a. m. to ten p. m. A day-long field trip to the Hauser geode bed will take place on February 9, the caravan leaving Blythe at seven a. m.

Show is open to exhibitors outside the society, with no charge for display space. Prospective exhibitor must notify the society, Box 53, Blythe, before January 15, 1947, so that every exhibitor can be listed in the program. Limited number of dealers will be allowed to sell specimens at the show by special invitation.

escent shows, one of them featuring a new Arizona find, and cases of rare minerals, semi-precious stones and faceted gems. Over 1500 specimens were loaned by members of the Mineralogical Society of Arizona, Phoenix. Yavapai Gem and Mineral society of Prescott also participated.

Arthur L. Flagg, president of the Phoenix group was in charge of the exhibit, while Ben Humphreys, also of the M.S.A., assisted, with many society members volunteering labor. Twenty members of the M.S.A. acted as ushers during the fair period.

IMPERIAL SOCIETY FINDS NEW COLLECTING AREA

Imperial Valley Gem and Mineral society realized a rockhound's dream on its November 9-11 field trip: an untouched field of good agate and opal. The location was discovered when field scout Lloyd Richardson was attempting to find a new road out from camp. The road in had all but stopped the caravan, necessitating much shovel work as well as expert driving. The sought for road was located, but departure was definitely delayed while 21 field trippers gathered agate. The material is multi-colored agate and common opal covered with rhyolite. Most of it is in chunks weighing from two pounds up.

Besides the new agate field, the group collected some beautiful chalcedony and large and fine quality tridymite specimens. Night hunters found common opal and fluorescing chalcedony.

ARIZONA FAIR MINERAL EXHIBIT BREAKS ATTENDANCE RECORDS

More than 55,000 visitors thronged the mineral exhibit in the Mines building at Arizona state fair, November 8-17. Visitors registered from nearly every state and from British Columbia, Central and South America, England, France, Norway, Sweden, Italy, China and Australia. A large part of 5,000 square feet floor space of the show was taken up with exhibits of a permanent nature provided by counties and larger mining companies.

Special exhibits included two popular fluor-

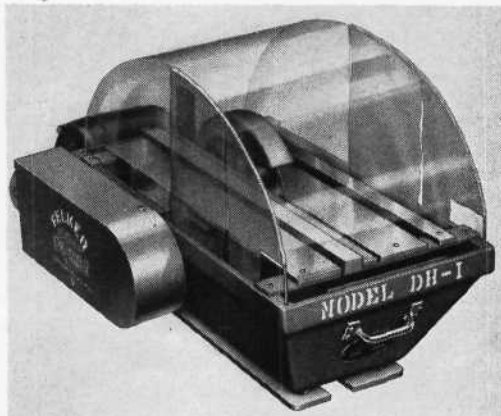
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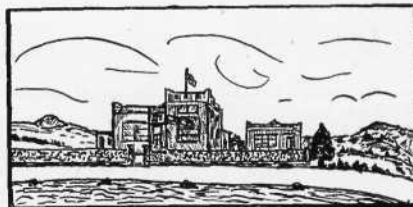
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NEW YEAR



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ASSORTED PREFORM CABOCHONS—25c each—10 for \$2.00.

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SPECIAL INTRODUCTORY Offer: To introduce our new find of fine red and pink, lace and moss Agate, I am offering a limited amount of sawed slabs at 20c per sq. inch, rough at \$1.50 per lb. Good heavy vein material, little or no waste. Lee Phelps, 1104 Portland Ave., Bend, Oregon.

FOR SALE: Petrified Palm Root, black and grey with eyes. Also fibers and cattails, \$1.00 per lb. plus shipping fees. Rates on large pieces. Sawed pieces by request. Write for prices on sawed material. From original location. Maida Langley, Box 331, Needles, California.

WANTED: Polished pea size specimens, Moss Agate, Turquoise, Jade. Write P. O. Box 3481, St. Paul, Minn.

WANTED TO BUY—Wholesale quantities of Jasper, Turquoise and Petrified Wood of gem quality. Bring samples in or mail. Open account or C.O.D. Write full particulars. Collections bought, liberal appraisal. El Camino Gem Shop, Box D, Solana Beach, California.

JUST BOUGHT—A large assortment of minerals, specimens, rocks, etc. A large box of these \$6.00 or 60c per lb. in assorted shipments. 2 lbs. and up. These assortments will contain Woods, Agate, Bone, Crystals, Mineral Specimens, Rock Specimens, and many more. No two alike. Each box a nice collection. Also write for price list on other materials for cutting or specimens and don't forget the fluorescents. Jack the Rockhound, P. O. Box 86, Carbondale, Colo.

FOR SALE: Good grade of Turquoise by ton lots. Will send samples. Mrs. J. H. Drake, Box 866, Kingman, Ariz.

JANUARY SPECIAL: 35 cents square inch, Dinosaur Bone; Flowering, Iridescent, Brown and Black, and Black Obsidian; Jaspers; Petrified Wood; Two Idaho Geodes with each one dollar order. Fred's Gem Shop, Hansen, Idaho.

MINERAL SETS guaranteed by the Old Prospector. The Student set, fifty mineral ores size one inch plus, \$10.00. Collectors set of 100 mineral ores, size one inch plus \$20.00. Fluorescent set of fifty fluorescent mineral ores, size one inch plus \$20.00. Above sets in wooden box mounted or loose in compartments in cardboard box. The Prospector set of fifty mineral ores size 3/4 inch plus in cardboard box mounted or loose in compartments, \$4.00. State preference, loose or mounted. All specimens identified and described in booklet. Postage paid. Mineralight in beautiful case, weighs 2 1/4 lbs., works off of lantern battery, quickly identifies fluorescent minerals. Postpaid with battery \$35.00. Old Prospector, Box 21A28, Dutch Flat, Calif.

HAND MADE sterling silver mountings from template or drawing of your cabochon. No need to mail your stone unless you desire. Write to "Silver" Smiths, Box 76, Fernley, Nevada.

FINE AGATE ring cabochons—\$8.00 and \$10.00 per dozen. Silver mounted agates, wholesale, \$20.00 per dozen and up. Custom cabochon cutting and silver mounting. North West Gem Shop, Box 305, Tacoma 1, Wash.

FOR SALE: Semi-precious stones, cabochons and facer cut. Slabs of same on approval to responsible parties. State what you want. Colorado Gem Co., Bayfield, Colo.

AUSTRALIAN FIRE OPALS—Large stocks of cut and polished doublets and solids. Small quantities rough cutting material as available. Shipment inquiries welcomed. Woodrow A. Oldfield, Cr. Whitehorse and Union Roads, Mont Albert, Victoria, Australia.

FOR SIXTEEN YEARS we have sold our desert gems and minerals, largely to visitors at our shop. We are now in better shape to handle mail orders than before. So now we are offering, as a demonstration of our bargains, nodules dug by John Hilton before the war in hot, dry Death Valley, to a depth of twenty feet. These nodules have a bright red matrix, beautifully framing intensely blue agate of various shades. They are desirable for book-ends, pen sets, paper weights, novelties and jewelry. The blues in these nodules are not like those usually found in nodules, for the colors are retained even in polished gems. These nodules have been heretofore sold by dealers lucky enough to have them for \$1.50 a pound. But we will send five pounds f.o.b. Thermal for \$3.00, and fifty cents for each additional pound. Not sold in lesser quantities. Sizes from 2 to 12 inches in diameter (a few larger). Please state sizes preferred. Orders filled same day received. Of course, we have other bargains, also. Correspondence invited. Hilton & Greb Gem Shop, Thermal, California.

CABOCHON BLANKS: Jasper, mixed, 6 for \$1.00. Moss Agate and Rhodonite, 4 for \$1.00. No flaws. Al Thrower, Box 305, Santa Cruz, Calif.

SPECIAL ON Rough Cutting Material. 2 pounds Fortification Agate 30c, 2 pounds Petrified Palm 40c, 2 pounds Novaculite \$1.00, 2 pounds Flowering Obsidian \$1.00, plus postage. THOMPSON'S STUDIO, 385 West Second Street, Pomona, Calif.

HAUSER BED Geodes, mixed whole and halves, 50c lb. Fluorescent specimen Assortment \$1.00. Desert Roses, small, 25c. Slab Assortment, agates, petrified woods, 20 in. or more, \$5.00. 5 cabochons, assorted, \$5.00. Tax included, Postage Extra. McShan Ranch Gem Shop, Box 22, Needles, Calif.

JANUARY SPECIAL! To make room for new stock. Send us \$2.00 for a nice single specimen or your choice of a combination of three specimens of the following: Pala or Mesa Grande tourmaline matrix, apatite, Higginsite, amber calcite from Mexico, honey opal, Hauser bed geodes—uncut, petrified wood, wulfenite, onyx (carbonate) from Mexico, gypsum pseudomorph after glauberite, beryl xls from New Hampshire, Quartz xls from Hot Springs, Arkansas. Money back guarantee if not satisfied. GemArts Company, 4286 Marlborough, San Diego 5, Calif.

BARGAIN ASSORTMENT No. 12 — One sweetwater Moss agate. One chunk fine gem moss agate. One chunk moss opal from Wyoming. One Idaho nodule to cut and polish. One Oregon beach agate, lovely when polished. One chunk Nevada wonderstone, cuts into fine slabs. One slice fine banded onyx. One chunk fine white banded agate. One chunk Texas Agate. One chunk dark petrified palm. One rough Montana sapphire, to make into ring stone. All for \$3.00 plus postage on 5 pounds. West Coast Mineral Co., Mail address, Post Office Box 331, La Habra, Calif. Shop address 1400 Hacienda Blvd., La Habra Heights, Calif.

ATTENTION Advanced Crystal Collectors. We are at last unpacking some of the fine crystals of calcite which were mined incidentally to the production of optical crystals for the famous polaroid ring sight. These are not samples picked off the dumps. They are the choice mineral specimens saved by John Hilton during the actual mining operations. Write for our five dollar selection of these San Diego county calcites. (Please state whether you are interested in rare crystal forms, beautiful display specimens or fluorescent material.) Hilton and Greb Gem Shop, Thermal, Calif. See our display on Highway 99, 11 miles south of Indio.

25 COLORFUL, Assorted Arizona Specimens, including quartz crystal geode, thunderegg, chalcedony roses, amethyst crystals, agates and others for \$2.00 postpaid. H. Mick, Box One, Morristown, Arizona.

HIGHLY OPALIZED and Colored Wood. \$1.00 pound plus postage. Please state if you wish one large piece or smaller ones. H. Dunkel, Box 21, Knights Ferry, Calif.

INDIAN RELICS, Curios, Coins, Minerals, Books, Old Buttons, Old Glass, Old West Photos, Weapons, Catalogue 5c. Lemley Antique Store, Osborne, Kansas.

GILDE GEM CUTTER. We now offer this compact portable outfit to the home cutter. Write for details and new catalog listing over one hundred varieties of rough. Also all kinds of supplies. Gem Exchange, Bayfield, Colo.

BARGAIN BUNDLES—Assorted rough cutting material—Agates, Jasper, Geodes, Variscite, Turquoise, Chrysocolla, Petrified Wood, Obsidian, etc., 5 lbs. \$3.50, 10 lbs. \$6.00, 20 lbs. \$10.00. Assorted sawed cutting material—20 sq. in. \$3.50, 50 sq. in. \$7.00, 100 sq. in. \$12.00. Agate, Jasper, Chrysocolla, Variscite, Turquoise, Wood, Rhodonite, Obsidian, Opal, etc. Please include postage. Send for price list of cutting material, minerals, specimens, jewelry, etc. John L. James, Tonopah, Nevada.

100 GOOD GRADE ancient Indian arrowheads \$4.00, 1000 \$30.00. Tomahawk, hoe, discoidal, axe and 20 arrowheads \$5.00. Large flint knife, large spearhead, game ball, celt and 20 stemmed scrapers \$5.00. 100 blemished spearheads \$10.00. 100 fine arrowheads \$10.00, 100 slightly blemished stemmed scrapers \$4.00. 100 beautiful sea shells \$10.00. List free. Lears, Box 569, Galveston, Texas.

MINERAL SPECIMENS, slabs or material by the pound for cutting and polishing, RX Units, Felker Di-Met Saw Blades, Carborundum wheels, Cerium Oxide, Preform Cabochons, Indian jewelry, neck chains. Be sure and stop. A. L. Jarvis, Route 2, Box 350, Watsonville, California, 3 miles S. on State highway No. 1.

ATTENTION is called to the new location of Swisher's Rock and Novelty Shop, at 4719 So. Hoover St., Los Angeles 37, Calif. The place for rare novelties, Petrified Woods, mine minerals, Agates, Geodes, etc. Beautiful costume jewelry made from lovely Petrified Wood. When visiting Los Angeles call on us. Swisher's, 4719 So. Hoover St., Los Angeles, Calif.

CAN SUPPLY Montana moss agate, agatized wood, jasper, jade and sapphires. The sapphires are small and are put up approximately 75 in a glass vial with two or three Montana rubies included for \$1. Good grade agate \$1 per pound plus postage. Jade in various shades of green \$3 per pound and up. E. A. Wight, 217 Hedden Building, Billings, Montana.

INDIAN ARROWHEADS, birdpoints, war-points, fine, each 25c; very good 15c; good 10c. Two fine (or four average) 3" to 3½" spears \$1.00. One fine (or two average) 3½" to 4" spears \$1.00. Fine jasper gemstone material, many colors, \$1.00 per lb. Arizona fossils, 25c each. Everything prepaid. Prices of Yumas, Folsoms, pipes, beads, axes, pottery, antiques, guns, coins, etc., upon request. (I buy—sell—exchange.) Paul L. Summers, Stamford, Texas.

WANTED: Excellent crystallized specimens, outstanding cutting material for wholesale trade. Send specimen samples and prices. Jack Frost, 59 E. Hoffer St., Banning, California.

\$2.50 brings you prepaid six rare and beautiful crystallized Arizona minerals. Vanadinite, Diopside, Wulfenite, Willemite, Chrysocola, Azurite. Specimens 1½x2 or larger. Wiener Mineral Co., Box 509, Tucson, Arizona.

MONTANA MOSS AGATES in the rough for gem cutting, \$1.00 per lb. plus postage. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

MINERALS, GEMS, COINS, Bills, Old Glass, Books, Stamps, Fossils, Buttons, Dolls, Weapons, Miniatures, Indian Silver Rings and Bracelets. Also Mexican. Catalogue 5c. Cowboy Lemley, Las Cruces, New Mexico.

ROCK COLLECTORS—ATTENTION. Back home in the desert. As you drive Highway 111 this winter be sure and stop at the big yellow trailer and see the finest variety of rock and mineral specimens in the West. The Rockologist, Box 181, Cathedral City, Calif.

MINERAL SETS—24 Colorful Minerals (identified) in 1x1 compartments—Postage paid, \$3.50. Prospector's Set of 50 Minerals (identified) in 1x1 compartments in cloth reinforced sturdy cartons. Postage paid \$5.75. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, Calif.

THE DESERT RATS NEST will reopen with a good supply of minerals, sold under the old guarantee. But I shall cater mainly to facet and fine cabochon cutters. Third Brazilian shipment now in—all first grade gem material. Amethyst, Andalusite, Golden Beryl, Chrysoberl, Brazilian Almandite, Garnet, Blue and white Topaz. Now in, Ceylon shipment, Gray and gray Star Sapphires, Ceylon Moonstone, will wholesale some. On hand, facet material—Australian Sapphire, Montana Garnet and Sapphire, small Mesa Grande bi-color green and rose Tourmaline. On hand, Finest cabochon Aventurine for stars, star garnets, Star sapphires, Ceylon Moonstone, poor grade Mexican opal, green and golden Beryl, topaz blue Amethyst, Citrine, Tigers Eye, Rutulated Quartz, 3 colors Rutile, tiny blue Tourmalines in Quartz, Sagenite, Sweet-water Agates. Lots of specimens, tell me what you want, no list. Mail address, Geo. W. Chambers, P. O. Box 1123, Encinitas, Calif. Home address, 640 Fourth St., between F & G Sts. Come on down and bring your surf fishing rod.

100 MINERALS and fossils, nice size, \$4.00. 40 small \$1.00 ppd. Bryant's Rockpile, Rt. 2, Lawrenceburg, Ky.

MINIATURE SETS, Asst'd per doz.\$6.00
50 RING STONES, including genuine and synthetic\$7.50
SYNTHETIC RUBIES or GENUINE GARNETS, per carat\$1.25
CAMEOS or OPALS—Genuine—12 for \$3.75
100 JEWELRY STONES removed from rings, etc., \$2.40; 50 large ones\$2.40
12 ARTICLES ANTIQUE JEWELRY, rings, pins, etc.\$3.00
500 COSTUME JEWELRY STONES\$2.00
B. LOWE, Holland Bldg., St. Louis 1, Mo.

AMONG THE ROCK HUNTERS

At November meeting of Desert Gem and Mineral society, Blythe, the club elected officers for 1947: Collis S. Mayflower, president; Jerome Keim, vice-president; Glenn Vargas, secretary-treasurer and F. G. Sterrett, assistant secretary-treasurer.

Frank Hornkohl told November gathering of Kern County Mineral society, Bakersfield, California, about his experiences on petroleum section of the air corps and discussed some new developments in chemistry. Thirty-five members attended the Horse canyon field trip.

October 23, 1946, was the birthday of another new rock club—the San Geronio Mineral and Gem society, Banning, California. George Buckner was elected temporary chairman and C. T. Frost, 59 E. Hoffer, Banning, secretary-treasurer. Mr. and Mrs. Carl A. Hageman offered facilities of San Geronio Inn for the meetings to be held third Wednesdays of each month. Purpose of the group is collecting, study, cutting and polishing of rocks and the collecting and study of minerals. Beauford Hansen was actively interested in forming the club and handled all initial correspondence. Paul Walker of Beaumont gave a talk at the first meeting on the Emily Post of handling mineral specimens.

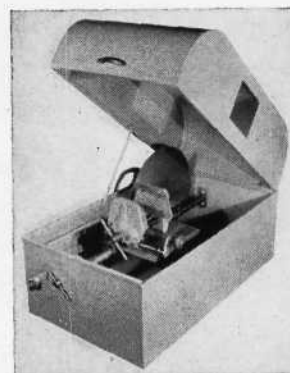
E. K. Brown, formerly of Seattle, but now residing in El Centro, told members of Imperial Valley Gem and Mineral society at November 20 meeting about rocks in the Big Bend district of Texas. He displayed a table of material from that region. Eva Wilson talked on desert trees, showing pressed and mounted examples of flowers and foliage. There are only eight trees native to the Colorado desert: palm, ironwood, honey pod mesquite, screwbean mesquite, cottonwood, smoke tree, elephant tree, palo verde. The desert willow, while plentiful, has washed in from the foothills.

Long Beach Mineralogical society planned a one day November field trip to the Santa Monica mountains via Mulholland highway. The area is of interest mineralogically and geologically. Heulandite, cordierite and chialtolite may be found as well as small agate geodes and fossil fish in diatomite. Over 1000 visitors attended the mineral show October 20. Outstanding among the displays were 14th century cameos carved from lava, a fire opal cameo, a large stibnite crystal, huge quartz geodes and a cluster of amethyst crystals weighing 150 pounds. Fossils, mineral specimens, cut and polished work and jewelry hand wrought by members added to the attractions. The exhibit, third sponsored by the Long Beach club, proved "biggest and best."

Colored slides of our national parks illustrated a talk by H. L. Womack at November meeting of Yavapai Gem and Mineral society, Prescott, Arizona. Mr. and Mrs. Womack and their son visited Grand Canyon, Teton, Zion, Bryce, Cedar Breaks and Yellowstone in the United States and Kootenay, Banff-Lake Louise and Waterton lakes in Canada during the summer. Mr. and Mrs. Schell of Camp Wood exhibited their collection, which included many beautiful pieces of polished sagenite and unique manganese dendrite formations.

Members of the Nebraska Mineralogy and Gem club saw colored pictures of the growth of the volcano of Paracutfn, Mexico, at their November meeting in the Hotel Paxton, Omaha. Pictures were taken by Mr. and Mrs. R. D. Wilson of Omaha, who were in the vicinity when the volcano broke through a cornfield.

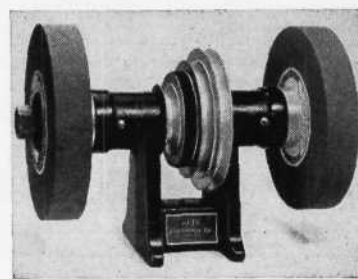
'Alta' Lapidary Equipment



DIAMOND SAW UNIT, 16" Capacity. Will cut slabs 6 by 8 inch with 4" cross feed. 3 speed power feed with quick return feature.

Price (less motor and blade)\$127.50
 Shipping weight 115 lbs.

16" dia. Felker Rimlock Blades in Stock

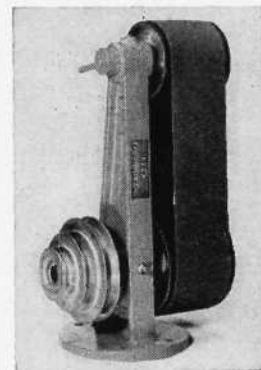


GRINDING ARBOR Heavy construction. Sealed SKF Ball bearings. Shaft 15" lg. with ¾" arbor for up to 10" dia. wheels. 42" Belt furnished. Built to last a lifetime.

Price (less wheels)\$22.50
 Shipping weight 23 lbs.

Lg. assortment grinding wheels in stock

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Northern California Mineral society, San Francisco, held open house November 3 at the society's rooms, 422 Belvedere street. There were displays, an auction, buffet supper, grab bag, door prizes and surprises. Committee in charge consisted of Mr. Bolander, Helen Burress, Harriet Thompson, Louis Eddy, Margery Krauer and Mr. Miller. At November 20 general meeting Oscar Gisler told of experiences on a recent mineral collecting trip and displayed many beautiful specimens.

Marie Gillespie, 944 North Serrano avenue, Hollywood 27, California, publicity chairman of Hollywood Lapidary society, reports that the group, organized last June, has had an exceptionally enthusiastic beginning. President is Dr. Ronald MacCorkell; secretary, Virginia Fraser. Each month has been marked by field trips, meetings and displays. Horse canyon, Lavic, Chuckawallas and Bicycle lake have been visited. Monthly meetings are held second Thursdays, Plummer park, 7377 Santa Monica boulevard, Hollywood, 7:45 p. m. Visitors welcome.

San Fernando Valley Mineral and Gem society elected the following in November: Charles W. Clark, president; Dan Hamer, vice-president; Mrs. W. L. Cooper, 445 West California street, Glendale, secretary; Lawrence McKinley, treasurer. A mineral and gem spelling bee was a feature of the evening. Wm. Kuhn, winner, was awarded an amethyst cabinet specimen. Field trip to Pine canyon was scheduled for November 24 under leadership of Joe Iversen.

Searles Lake Gem and Mineral society realized \$88.47 profit from the hobby show. Member Lt. Matt Kenny has sent a carved "hunk of rock" to the society from Nanking. It has not yet been identified, but may be marble or alabaster.

A. P. and F. N. Bently showed colored movies of scenes in Colorado and Wyoming at November meeting of Texas Mineral society, Dallas. Members displayed some outstanding fluorescent specimens. Raymond McIver discussed his experiments made with new sanders now on the market.

W. R. B. Osterholt, geology teacher Santa Monica city college, talked on field trips at November meeting of Santa Monica Gemological society. He explained where to go, what to look for and how to recognize mineralized areas. President Vern Cadieux discussed transportation and camping phases of the subject. Meeting night has been changed to first Wednesdays. Garlock jasper deposits were visited in October and the Lead Pipe springs section in November.

Jack Streeter, member, spoke on his trip to Brazil at November meeting of Los Angeles Lapidary society, showing lovely specimens of various materials to illustrate his talk. Marie Lackie, another member, lectured on geological occurrence of California agate at September meeting. Ten members went on a field trip to Montana for sapphires, but found none of worth. November field trip was scheduled to Mule canyon for dendritic travertine and various kinds of agate.

Sacramento Mineral society displayed over 3000 individual items at its annual exhibit held October 13-14 in Clunie auditorium. Visitors from all parts of California attended. Trays of polished gems mounted on a revolving pedestal attracted particular attention. Noteworthy displays were put on by A. J. McClelland, Paul Downard, Wm. Holly, the MacClanahans, Hinseys, Colonys and many other members. Comments and questions by visitors proved that the show contributed to a considerable extent in increasing general interest in the study of minerals. Annual auction October 25 furnished an evening of fast and exciting action and some splendid buys for canny bidders as well as substantial returns for the society.

Annual Christmas dinner meeting of Los Angeles Lapidary society was held December 2 at the Police academy. Party was high-lighted by a gift grab-bag from which everyone present selected the package of his choice. On December 1, a house-warming field trip was taken to the new home of Louis and Katherine Goss. Some members watched lapidary demonstrations, while others dug in the large rock pile in the yard.

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Two motion pictures entertained Mineralogical Society of Southern California, Pasadena, at November gathering: manufactured abrasives (making and use of carborundum and aloxite grits, papers, wheels) and lead mining in southeastern Missouri—world's most important lead producing area. M. W. Gilbert has taken the display committee chairmanship in the absence of Louis Vance.

Allen Mains of Calexico, California, on a recent field trip of Imperial Valley Gem and Mineral society, to Arizona, found a chalcedony rose of very peculiar shape. It is about seven or eight inches long, about five inches wide at the widest part, and, in shape, a perfect map of South America.

C. H. Bishop of Los Angeles Mineralogical society was November speaker for Orange Belt Mineralogical society. The meeting was held in San Bernardino junior college social hall. The group formulated plans for a December 3 Christmas party which will be complete even to a Santa.

Pomona Valley Mineral club celebrated its first anniversary November 12 with a banquet attended by about 50 members and guests. Mr. and Mrs. Ernest Chapman, members of Mineralogical Society of Southern California, Pasadena, entertained with a lecture on minerals of Los Lamentos and Santa Eulalia, Mexico, using specimens and colored slides to illustrate the talk. Mr. Chapman offered information and advice to those contemplating a trip to the district. In appreciation of their entertainment Mr. and Mrs. Chapman were provided with small gifts from the club.

W. Scott Lewis, member, showed kodachrome slides to illustrate his talk on geology and natural science of Sequoia national park at November 8 meeting of Pacific Mineral society, Los Angeles. Plans for a four day trip to Good Springs, Nevada, were formulated.

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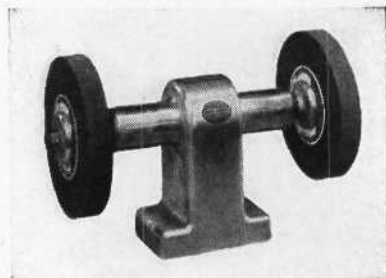
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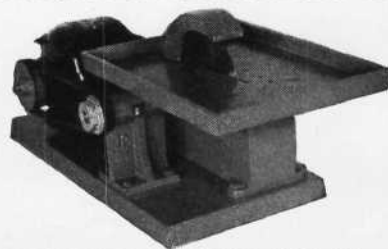
Of a Rockhound

By LOUISE EATON

It's not always the rockhound what barks the loudest that produces the best rox. The quiet little boddy (frequently gramma rockhound) who ambles tranquilly over field trip territory often finds the best specimen. And she duzn't yelp about it when she picks it up, either. She probably duzn't even know she has a outstandin specimen till the day's haul is spread out for inspeckshun.

Rockhouns has discovered, or at least the mama wuns has, that it is difficult to be good housekeepers an at the same time exercise rockhoun p'rogatives. Yu alwayz hafta be redddy to go on a weekend field trip—then it takes the furst part uv the nex week to straighten out camp gear, grub, etc., an then it's almost time to prepare things for another venture. Necessary house tasks like 3 meels a day, washin an ironin besidz a few club meetins fill spare time so that moppin, dustin or window cleanin gets cursory treatment. Enyhow what's the use uv keepin a house spik an span when one-third uv the time yu're eatin an sleepin out on the groun!

The ultraviolet lamp, Geiger counter and spectroscope have replaced tools of the old time prospector, Norman Whitmore told the November meeting of Los Angeles Mineralogical society. Mr. Whitmore discussed modern prospecting methods and displayed a collection of ores which included some unusual gold-bearing specimens.



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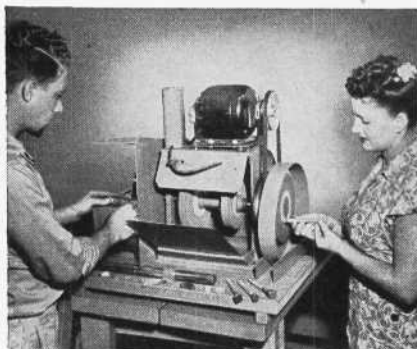
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Frank L. Fleener, guest speaker, discussed fossils, their nature and implication, at October meeting of Marquette Geologists association, Chicago, Illinois. Annual auction with Mr. Hoy in charge was scheduled for November 2. Proceeds from auction will be used to defray expenses of a field trip to the Belleview, Iowa, region. Mary Riordan was appointed by board of directors to serve out remainder of term of secretary-treasurer Marjorie Scanlon.

• • •

Members of Imperial Valley Gem and Mineral society recently found, within 200 yards of the kyanite mine at Ogilby, California, a mineral which seems to be new in that district. For years the place has been famous for kyanite, talc and crystals of limonite pseudomorph after pyrite. This new specimen is fibrous or pencil kidney ore of hematite, somewhat like the kidney ore of Cumberland, England, except that the balls are quite small, seldom more than 1½ inches, and commonly much less. Some are as small as ½ inch in diameter, and quite rough on the surface. Some of the broken pieces which were picked up in the neighborhood seemed to be of quite good quality, and almost a pound in weight. No one yet has tried cutting these either as cabochons or facet cut, but some pieces seem to be compact enough for such purposes.

• • •

Uranium and radium ores have been found in scattered places in Imperial county, California, by members of Imperial Valley Gem and Mineral society, but seldom "in place." Yttrotantalite and samarskite were picked up near Ogilby, recently, in small, shiny, blackish pieces. The streak is grey. They are opaque, hardness 5.5, and gravity almost six. The luster is sub-metallic to greasy.

• • •

Among the numerous "finds" in the vast Ogilby district of Southern California, have been pyrite crystals, limonite pseudomorph after pyrite, kyanite, talc, quartz crystals, amethyst, hematite, yttro-tantalite, samarskite, gold, silver, jasper, jasper pseudomorphs, agate, petrified wood of several kinds, dumortierite, palm wood, zeolites, arrow points, Indian pottery, common opal, precious opal, and all the countless specimens brought down in the past by the Colorado river.

• • •

Mrs. Louis Holtz, member, was slated to discuss geysers at November gathering of Chicago Rocks and Minerals society, showing pictures to illustrate her topic. An auction and raffle were planned for the evening. C. O. Horberg, University of Chicago, spoke on geology of the Teton mountains at October meeting.

DESERT SEES BRILLIANT METEORITE DISPLAY

The passing of the Giacobini-Zinner comet left behind, October 9, 1946, the most brilliant display of meteors in more than 100 years. And again the skies of the desert proved themselves the best place in the world in which to observe such phenomena. While many eastern astronomers had to use planes to climb above the clouds in order to see the heavenly fireworks, those who chose some place in the desert for their observations found the night cloudless and vision perfect.

Starting about 6:45, just after dark, the meteors began flashing in all directions, probably more than 100 per minute, 2000-4000 within an hour. These "shooting stars" seemed to flash indiscriminately in all directions, and in all sizes. Some of them were so large and bright that they might have cast a shadow under other circumstances. One great burning meteor, thrusting itself from the northwest toward the northeast, and leaving a broad band of fire behind it, seemed to explode, just before disappearing, sending flaming pieces in all directions like a giant sky rocket.

TRUE OR FALSE ANSWERS

Questions are on page 28

- 1—False. The burro is believed to have been brought to the Southwest by the Spaniards.
- 2—False. Squaw cabbage grows wild in certain desert areas, but was never cultivated by the Indians.
- 3—True.
- 4—False. Creosote blossom is yellow.
- 5—True. 6—True. 7—True. 8—True.
- 9—False. Lowell observatory is located on Mars Hill, just out of Flagstaff, Arizona.
- 10—False. Location notices are required only in the discovery monument.
- 11—True. 12—True.
- 13—False. Salton sea was filled by the floods of 1905, 1906 and 1907.
- 14—False. Sheep were brought in by the Spaniards.
- 15—True. 16—True.
- 17—False. Pauline Weaver was a man—a Mountain Man.
- 18—False. There were no horses in the Southwest in the cliff-dweller period.
- 19—False. Santa Fe is the capital of New Mexico.
- 20—True.



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AMATEUR GEM CUTTER

By LELANDE QUICK

My recent visit into the Navajo country of northern Arizona and the Zuñi country in New Mexico was memorable. I had the great good luck to be in the Petrified Forest with Billy Pitts, "dean of amateur lapidaries," who was starting his annual jaunt to the nation's principal museums, in most of which he has fine displays of his lapidary skill. The polished petrified wood in the museum at the forest is the finest collection of wood I have seen. It enables thousands of visitors to see what lapidary treatment does for the beautiful logs.

My visit to the Navajo reservation for garnets was disappointing and I found the advice given me by Wilfred Eyles, maker of the famous diamond "saw" (as he calls it), was true. Eyles had sent me some of these fine pyrope garnets and told me the Navajo would pretend not to understand English and would reply in Navajo. My best bet, he said, would be the Indian traders. I found Eyles' advice to be true except that most of the traders I talked to were more taciturn than any Indian. I found only one trader who would admit that he had ever seen a garnet.

My trip into Zuñi was more productive of information. There I found Jimmy Ashton, who acts as agent for the Zuñi artisans and furnishes their lapidary supplies. I do not recommend a side trip from Gallup into Zuñi, one of the oldest continuously inhabited towns on the continent. The government doesn't encourage you to go there and the Zuñis won't welcome you. They resent tourist prying. There are no signposts. You have to find your own way over roads with powder dust many inches deep. In rainy weather I suspect it would be easier to drive to Byrd Land in the Antarctic. But once you get there, if you go despite my advice, do see Jimmy Ashton at Wallace's store. He has the greatest collection of Zuñi jewelry in the country and supplies most of the dealers. The Zuñis grind and polish all of their own stones whereas the Navajo usually set commercially polished stones in their own handiwork. The little dancing figures of mosaic work are made of four materials—turquoise, abalone, mother of pearl and jet. Ashton secures these materials for the Indians. Their grinding is done on the smallest and coarsest wheels available, hand-powered like an egg beater. The Indian has plenty of time and he manages to turn out creditable work with these soft materials with K or J bond wheels. He never heard of cerium oxide.

It was a long jump from the Grand Canyon to Portland, Oregon, where I had a good visit with Doctor and Hilda Dake who are now editing the Mineralogist Magazine in their lovely home. I shall always remember the doctor because he kindly let me have one of two copies of the *Tears of Heliades* which he had acquired after years of search. The book was printed long before I was born and has been out of print many years. It is the authentic and complete story of amber (the gem and not the girl) and is delightfully told in quaint and flowery language. It contains a frontispiece, in color, of a necklace of amber beads containing a specimen of every color known. For the first time I learned that amber, like jade, has been found in every hue, and that the finest specimens are found in Sicily. Amber is a gem that few lapi-

daries have in their collections and one that could be treated with marvelous imagination in jewelry. The only specimens I remember seeing in any museum were some with insect inclusions shown as curios rather than examples of the lapidary art. Many readers probably own a necklace of the heavy cumbersome beads worn so much before the turn of the century. They could be recut and worked into some fine settings for modern jewelry.

The best news I gathered for the amateur gem cutter came from C. K. Worthen of the Bay State Abrasive Products company of Westboro, Massachusetts. Mr. Worthen showed Dr. Dake and me new types of abrasive wheels developed especially for us. I have made the claim that the great advance in lapidary machinery has been made because of the research of the amateur gem cutter. But the amateur could do nothing to improve the grinding wheel. Mr. Worthen's company, after much research, claims to have developed a new type of grinding wheel in several bonds that will outcut any of the wheels now on the market. He intends to go after the business of the gem cutting trade in earnest. If he just had a wheel that would never get bumpy, no matter what abuse was given it, he probably would sell all he could make at \$50.00 each. One radical advance in the grinding wheel he offers, which seems reasonable, is that it is made in a light green shade. "These wheels," said Mr. Worthen, "are easy on the eyes, nerves, pocketbook and valuable gems."

I took another long jump to Denver and once again my blood pressure rose when I visited the splendid Colorado Museum of Natural History, to find more mineral and gem specimens from California than exist in the Los Angeles museum. Why a fine museum like the Los Angeles museum, situated in the heart of the third largest gem bearing area in all the world, continues to have so little worthwhile mineral material I will never understand. Museums all over the world contain the finest specimens of California gem and mineral materials only because space has been provided and collectors encouraged to donate their specimens. It seems to me that it is more important to display the gems of an area than it is to house a copy of a 1910 automobile and Charlie Chaplin's shoes. The Colorado museum is an excellent example of educating the public in an area's resources, and its mineral collection is hardly surpassed anywhere.

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By RANDALL HENDERSON

IN THE desert, even the weeds have charm for those who have preserved that bit of artistry with which most humans are endowed. I wish every reader of *Desert* could have seen the exhibits in Twentynine Palms, California, late in November when the Women's club in that little desert community held its fifth annual "Weed Show."

Just to give you a glimpse of what artistic women find in this desert country to interest them, they had assembled from the drab sticks and roots and thorny bushes found on the desert landscape a replica of Huckleberry Finn, fishing in an upside-downstream, while a covered wagon paused for Tom Sawyer to angle in a sheltered waterhole, unaware that Bambi stood nearby. The masterpiece of the show was a woman's hat, a caricature of Broadway's latest creation, perched on a cactus stump in the garden. One of the awards went to the most artistic arrangement of weeds contained in an object picked from a junk pile.

Just weeds, but what a showing they make when there is added a bit of woman's artistry.

* * *

For eight years *Desert Magazine* has been printing a highly controversial feature entitled "Desert Refuge." It was the month by month story of the experiences of Marshal and Tanya South and their three children—living alone on Ghost Mountain on the western edge of the Colorado desert in Southern California.

Marshal and Tanya, both writers, went out there in 1932 at a time when jobs were almost unobtainable and the market for poetry and fiction, as well as nearly everything else, was very low. They turned their backs on civilization and together undertook an experiment in primitive living.

It was an interesting experience. Marshal, being a colorful writer, has dramatized it in a way that fascinated many of *Desert's* readers—and was quite disgusting to a few of the less tolerant. However, the family has lived comfortably on a modest income. They have minded their own business. And I thought they were happy. I have visited the adobe home at Yaquitepec many times in the last eight years—and have never heard an unkind or disloyal word spoken.

Then one morning recently the following headline in a San Diego newspaper glared at me: "Divorce Plea Breaks up Hermit family." Tanya had filed a complaint against Marshal. After 14 years, the Ghost Mountain experiment in primitive living had failed.

The news was no less disillusioning to me than it will be to thousands of *Desert* readers, a majority of whom have been sympathetic toward the unconventional way of life the Souths had chosen. In the hope that I might contribute something in the way of "Operation Salvage" I drove out across the desert and talked with both Tanya and Marshal.

I will not go into the details. Domestic troubles are never pleasant to discuss—nor to write about. As a friend who likes all the members of the South family because I have always found them kindly and sincere people, I would sum up their domestic difficulties in this brief sentence: "Two temperamental poets

lived so close together in such a small world they finally got on each other's nerves."

Obviously, a serial based on the home life of a family which no longer is united, cannot be continued. And that is the reason this explanation is given. A feature with the reader interest of Marshal South's "Desert Refuge," over a period of several years, cannot be dropped and ignored. The one bit of salvage I can report to *Desert* readers is that Tanya has promised to continue sending in her poems for each issue.

And so that is that. But I know both the friends and critics of the Souths will have many questions to ask. Is Yaquitepec to be abandoned? Who will have custody of the children? Will they have an opportunity to go to school? etc.

I can answer some of the questions. Marshal is living at Julian, California, where he has a modest position with the chamber of commerce. The children will remain with Tanya, and they will continue for the present to live in the little 'dobe house on Ghost Mountain. They have a comfortable home there.

Although the children, Rider 12, Rudyard 8, and Victoria 6, have never gone to school, they have been taught by their mother. In the basic studies of the classroom they have advanced beyond their years. In the schoolroom of Nature's outdoors, they know more than a great majority of American adults.

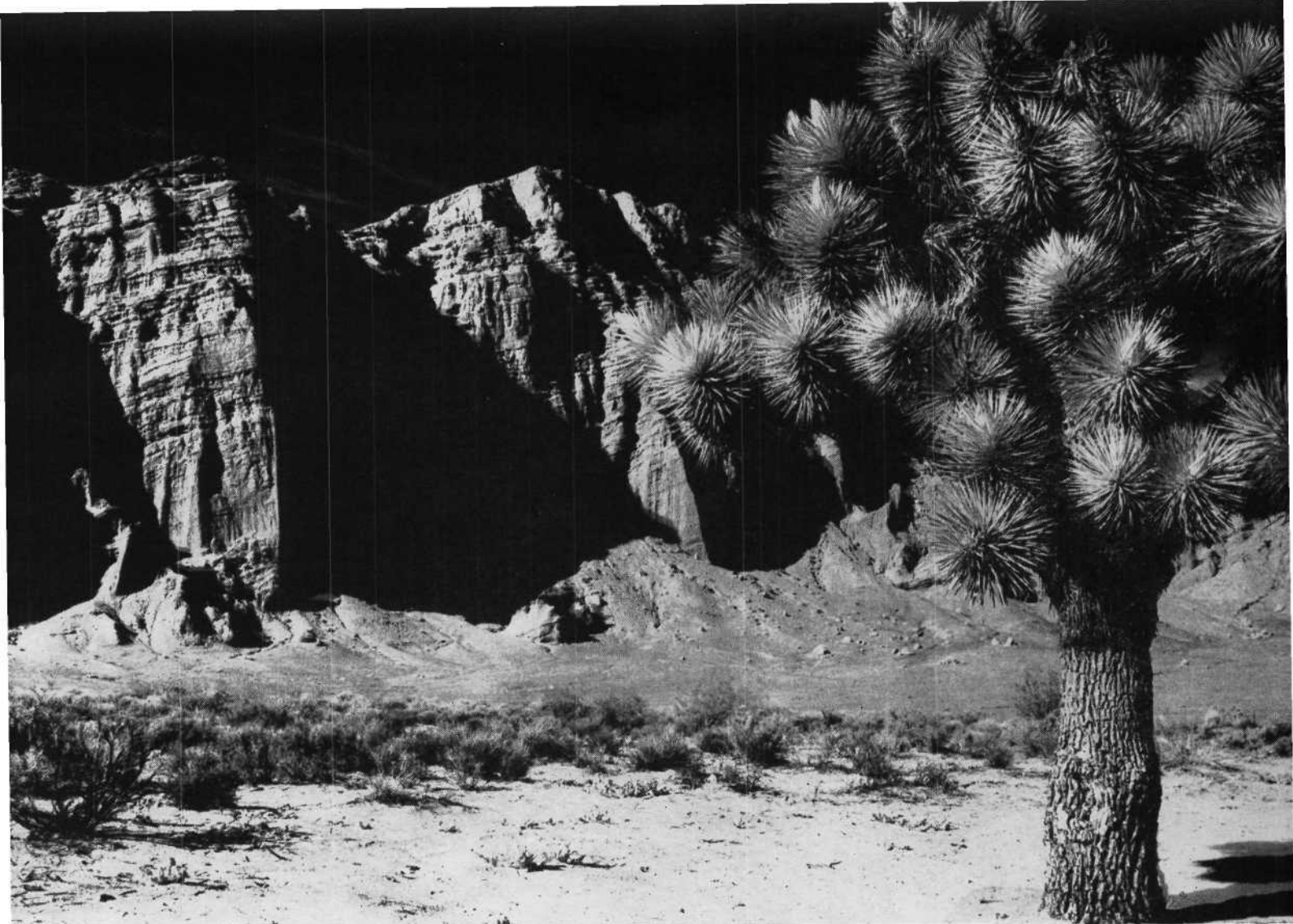
There will be adjustments to make later when they take up life in the outside world. I think they will make those adjustments without too much confusion. As a matter of fact their lives have been little different from those of countless families who pioneered on the frontiers as the settlement of the United States moved westward during the past 150 years. Those pioneers were your ancestors and mine. Clean living, no matter how great the hardship, has never been a handicap in the fulfillment of man's highest destiny.

* * *

During the Thanksgiving weekend I camped out with members of the Sierra club at the base of Kofa mountain in western Arizona. The Kofa is a wild rugged massif where under the protection of wildlife authorities mountain sheep often may be seen on the crags and the waterholes are visited by many species of game. In a dark narrow canyon on the west side of the mountain are the only native *Washingtonia* palms to be found in Arizona. How they came there no one knows, nor is there a visible source of water. But water is there—for the native palms must have their roots in moist sand.

For those who like to camp out, I can suggest no more restful spot than the shrub-covered bajada at the base of the Kofa. Dead ironwood is plentiful for fire, and the Yuma county road crew recently has bulldozed a 9-mile trail from the Quartzsite-Yuma road to the base of the mountain just opposite the canyon where the palms are located.

If John L. Lewis or the bickerings of the Big Five get on your nerves, drive out to the Kofa for a weekend. The Creator did a pretty good job when he made this world, and it is good for humans to get out into the desert wilderness occasionally and regain their perspective.



Red Rock Canyon, California—Infra-red photo by Robert J. Schulz.

YUCCA MOTH

By LAURA LOURENE LE GEAR
Long Island, New York

Cradled by the blossom,
Nursed on dulcet dew,
In a petaled blanket
The larva grew.

Nurturing strange satin,
The thin sepals fade;
From curling anthers,
Antennas made.

Yucca blooms lie fallen
As the white flower swings,
Opened to twilight
On frosty wings.

AFTERNOON CALL

By CLARICE WIDMAN
Loveland, Colorado

On a desert road, a shady nook
Beckoned to me one day.
I must only snatch a moment to rest,
Then hurry on my way.
But before me the grandeur of a natural bridge
Towered against the sky,
And a gnarled greasewood sprawled spiny arms
On a rocky ledge nearby.
The distant peaks of the mighty La Sals
Were clothed in bridal white,
And a cooling breeze caressed my cheek
To herald the coming night.
Against the glow of the setting sun
Wound the highway: a ribbon of grey . . .
I thought I had only paused to rest,
But my heart had come to stay.

Desert Message

By WHEELER FORD NEWMAN
San Pedro, California

This troubled age of deep uncertainty!
Small wonder that the souls within us turn
At last, despairing, to the mysteries
Only the desert knows.

Oh, eager land
That runs to meet the sun! Oh, spacious land
With breathless dawns unfolding like the gates
Of Paradise itself! 'Tis there a Hand
Shall touch and heal the wounds to heart and
mind
And to the soul; 'tis there the strident shout
That is the voice of progress for this age
Shall fade and die, till only to our ears
Sounds the clear message—

"Ye who need me, come;
Ye who are heavy laden, come and rest
On my clean sands, beneath low-swinging stars,
And listen to the lips of Solitude
Whisper, 'Let not your heart be troubled nor
afraid,
Let not your soul be bitter, nor your mind
Put on a cloak of darkness, but believe
In God, so that in time your turn will come,
Beside some desert campfire and alone,
To entertain an angel unawares
And break with him the bread of brother-
hood.'"

OLD PROSPECTOR

By MURRAY SKINNER
Los Angeles, California

With eyes that look at distances for ports
The feet will never step upon, he walks
Face forward, shoulders bent, a man of sorts,
Who lives alone, and, lonely, often talks
To self and burro tripping at his side,
Laden with grub-stake, water, miner's tools;
Indifferent to the world of men, takes pride
In self-reliance; thinks city-men are fools.
And yet, though he may sometimes touch a dock
Where wealth lies waiting for his eager hand,
Grown simple in his ways, the certain shock
Of his arrival is too much to stand . . .
Then city-men reap his reward, while he
Goes on . . . prospecting through eternity.

ON THE TREK

By TANYA SOUTH

The Future looms so crystal clear
To all who but restrain their fear,
And hate and dominance o'er others;
And see all people as their brothers
Struggling upon the Path. A turning
Here and there and all their yearning
Is realized or lost to view
As they play false, or staunch and true.
And all are in the self-same trek,
The self-same way of good or sin.
No one has all, nor can all lack.
And all have Paradise within.



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